

## Overview of the results of the household CHR10 Single man, 30 - 64 age, shift worker 0

Calculation Time  
Freitag, 1. Januar 2016 - Sonntag, 1. Januar 2017

Energy Intensity: Random

Seed 4691

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

<http://www.loadprofilegenerator.de>

Rendering date:16.12.2016 09:06:27

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## Totals

### Totals for each Loadtype

Load Type	Value	Unit
Cold Water	10214.17	L
Electricity	2035.40	kWh
Warm Water	55487.77	L

### Totals for each Loadtype per Day

Load Type	Value	Unit
Cold Water	27.91	L
Electricity	5.56	kWh
Warm Water	151.61	L

### Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	12.64	L/Min
Electricity	0.00	9712.71	Watt
Warm Water	0.00	25.00	L/Min

### Totals for each Loadtype per Person

Load Type	Value	Unit
Cold Water	10214.17	L
Electricity	2035.40	kWh

Warm Water	55487.77	L
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### Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	27.91	L
Electricity	5.56	kWh
Warm Water	151.61	L

## Persons

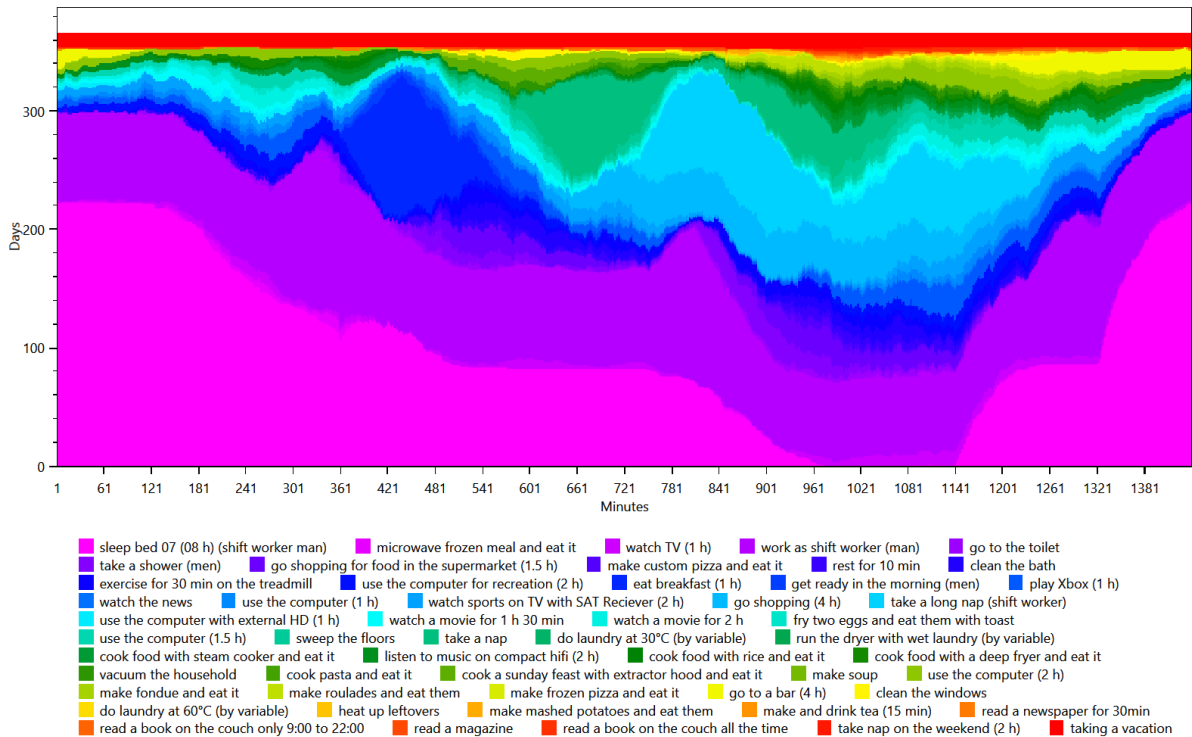
- HH0
  - CHR10 Alvin 2 (40/Male)(40/Male)

# Activity Frequency Charts

This is made from the files starting with: ActivityFrequenciesPerMinute

These charts show an ordered distribution of times of the activities of each person. This helps with judging quickly if a person is sleeping correctly and if they are going to work regularly.

HH0 - CHR10 Alvin 2 (40 Male)

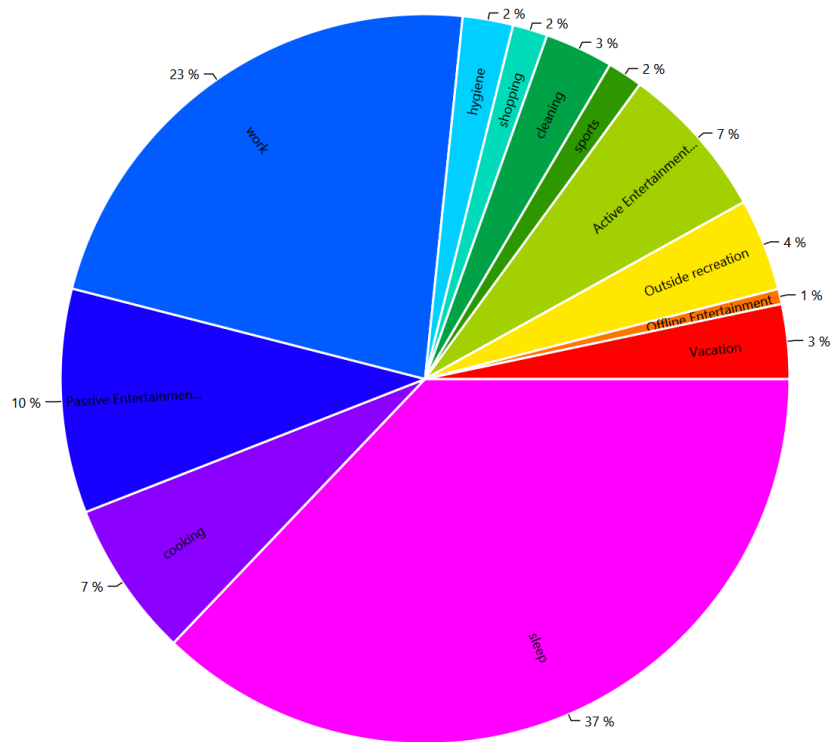


# Activity Distribution per Person

This is made from the files starting with: ActivityPercentage

This shows the distribution of the activities, grouped by the affordance AffordanceToCategories.

HH0 - CHR10 Alvin 2 (40 Male)

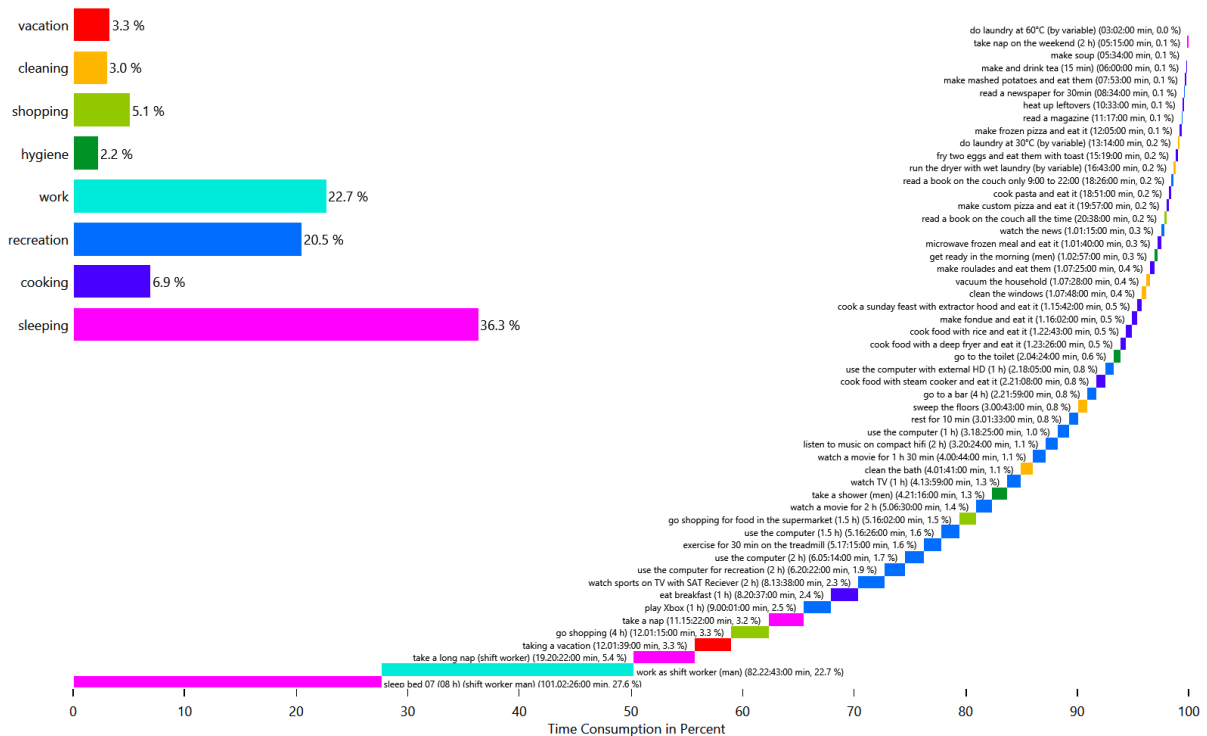


# Time Use per Person per Affordance Per Person

This is made from the files starting with: AffordanceTimeUse

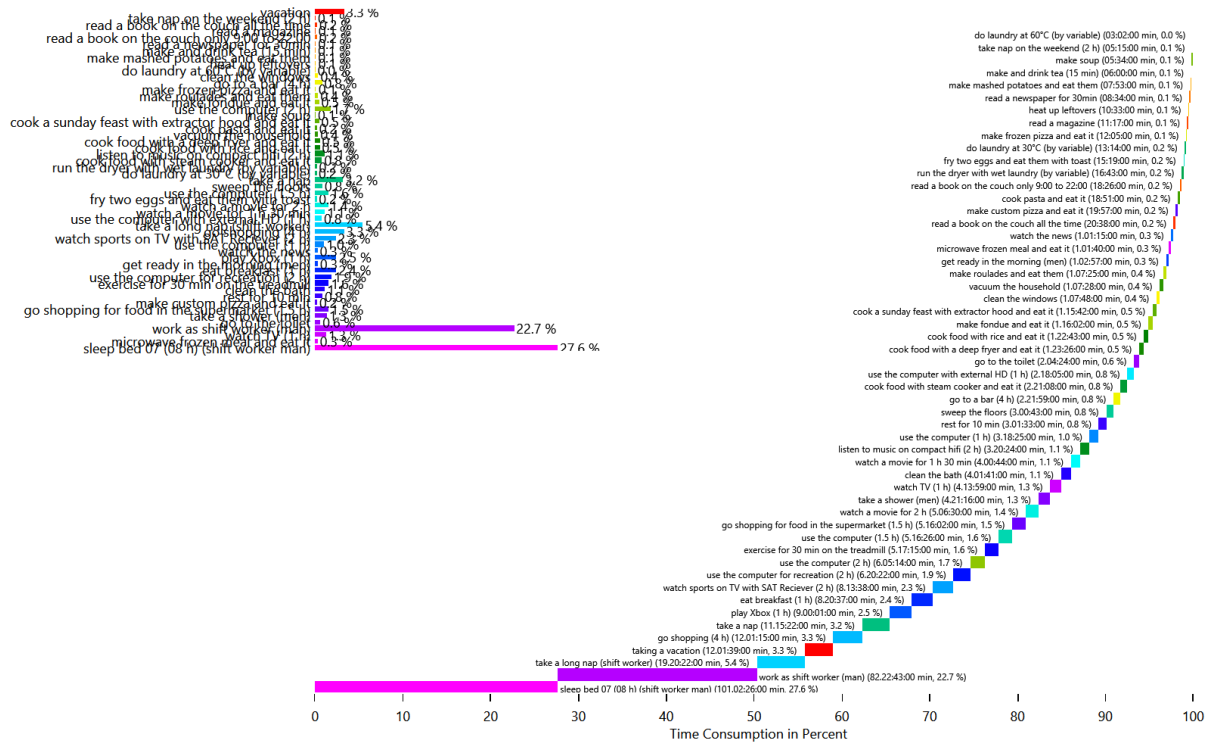
These charts show how the people in the household use their time. This shows the individual affordances to help find problems in the household definition.

## HH0 - CHR10 Alvin 2 (40 Male)

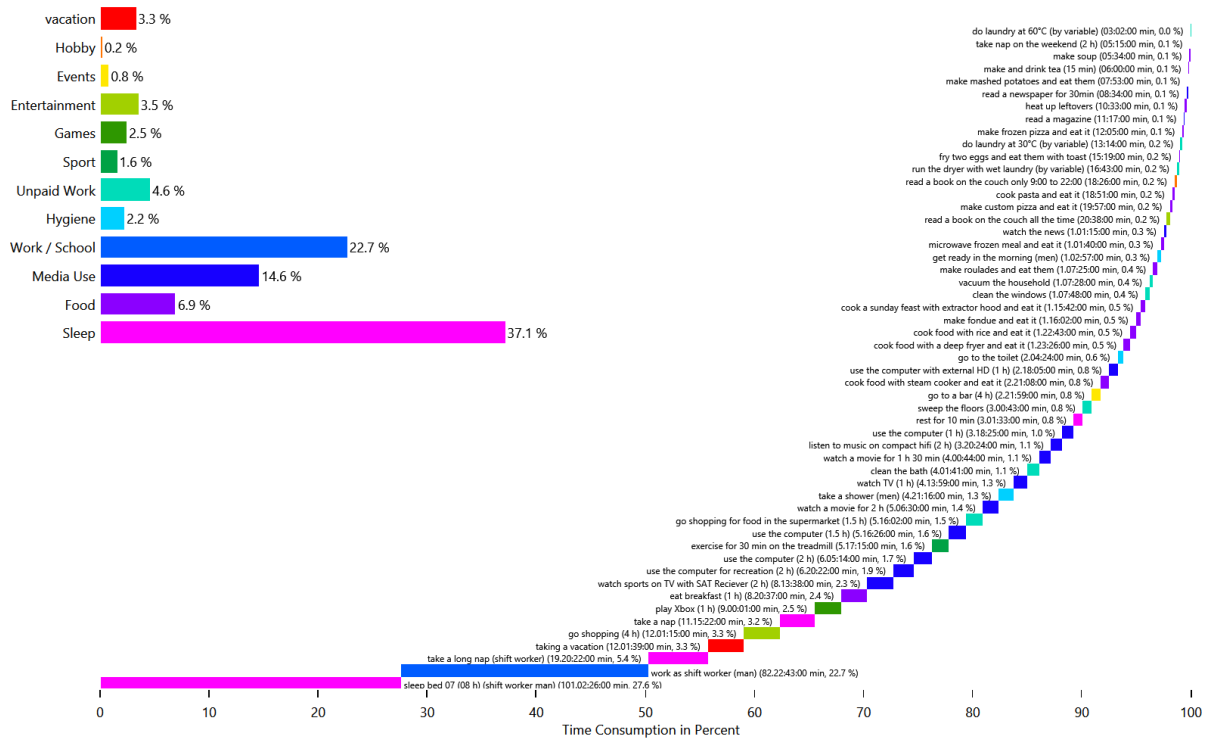




## HH0 - CHR10 Alvin 2 (40 Male)



## HH0 - CHR10 Alvin 2 (40 Male)

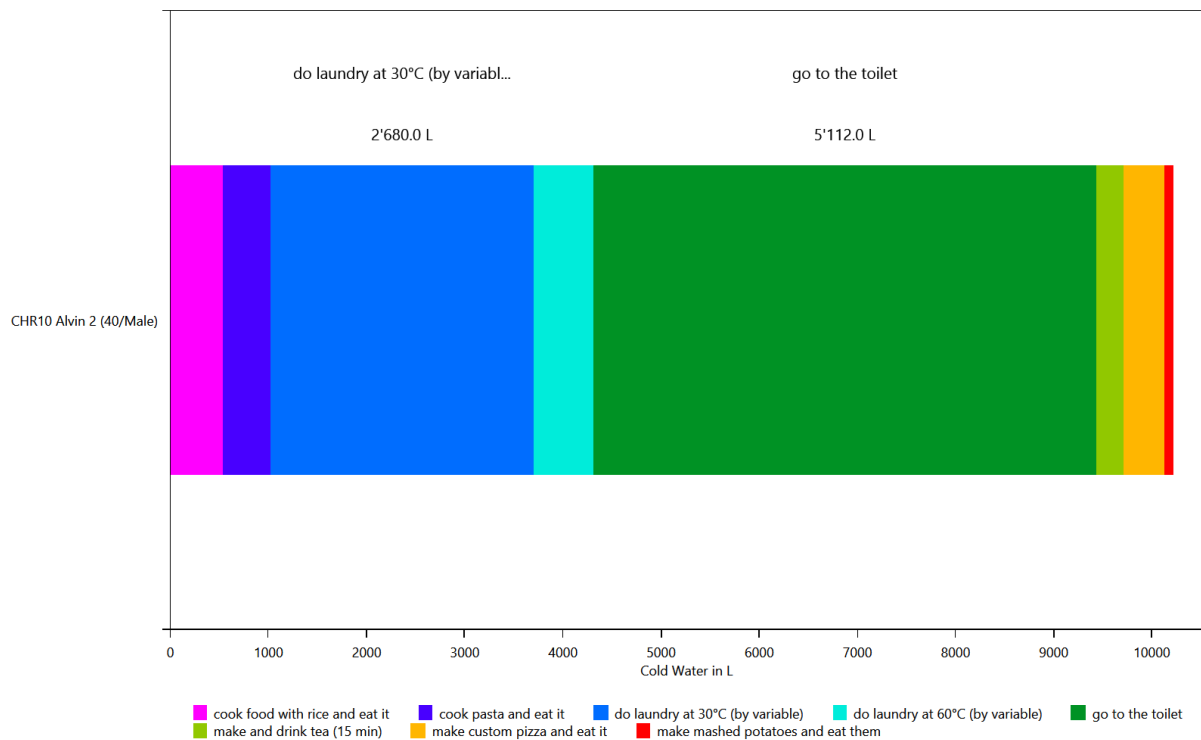


# Energy use per person per affordance

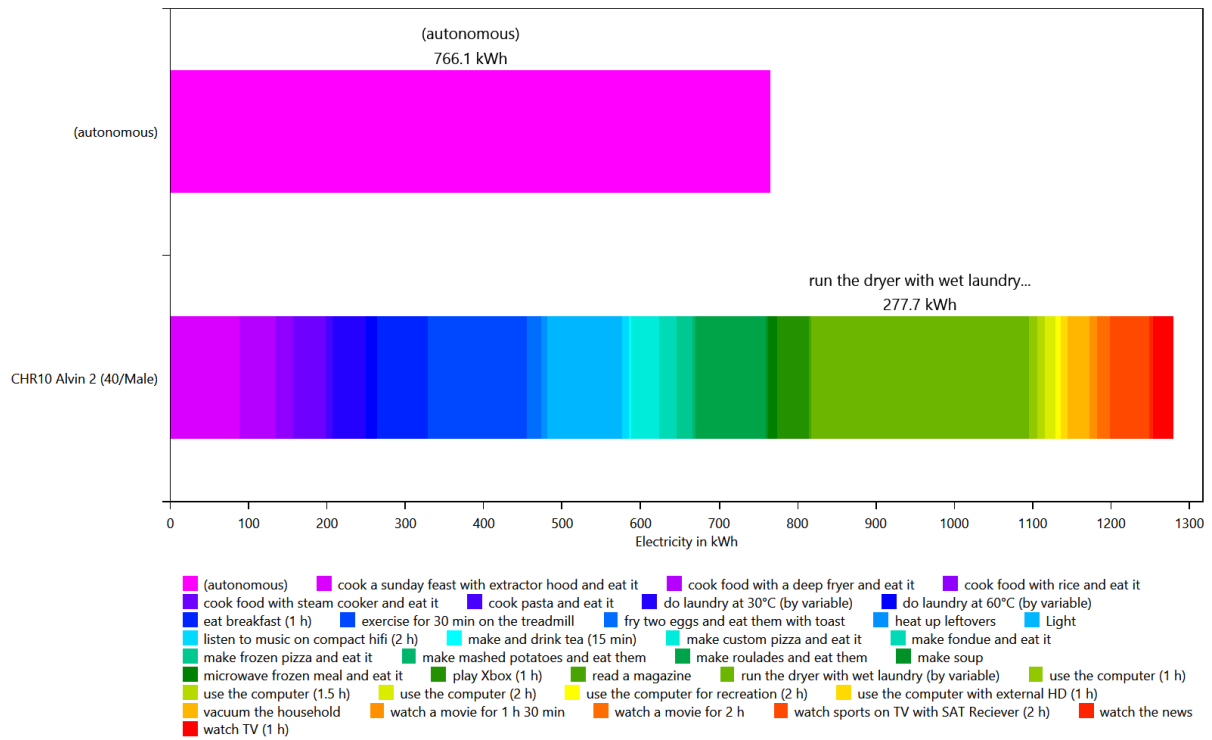
This is made from the files starting with: `AffordanceEnergyUsePerPerson`

This shows the distribution of the energy/resource use to each affordance by load type and by person. This helps with figuring out if a person is using too much electricity.

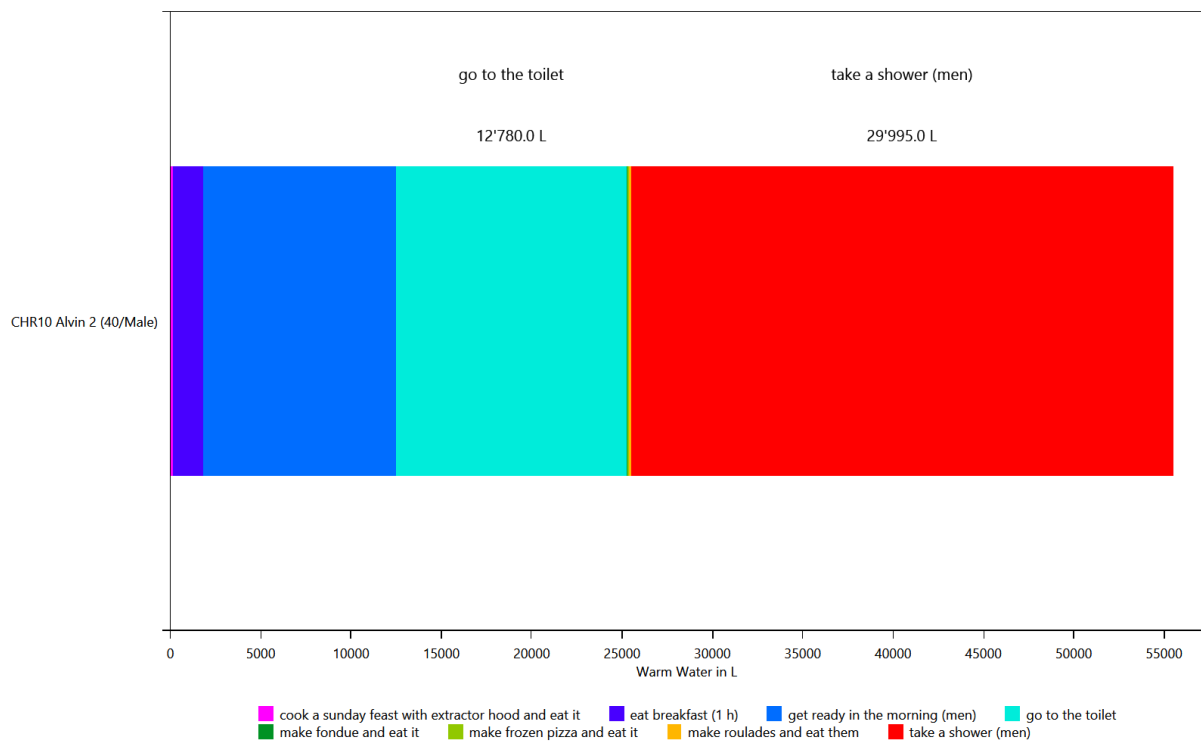
## HH0 - Cold Water



## HH0 - Electricity



## HH0 - Warm Water

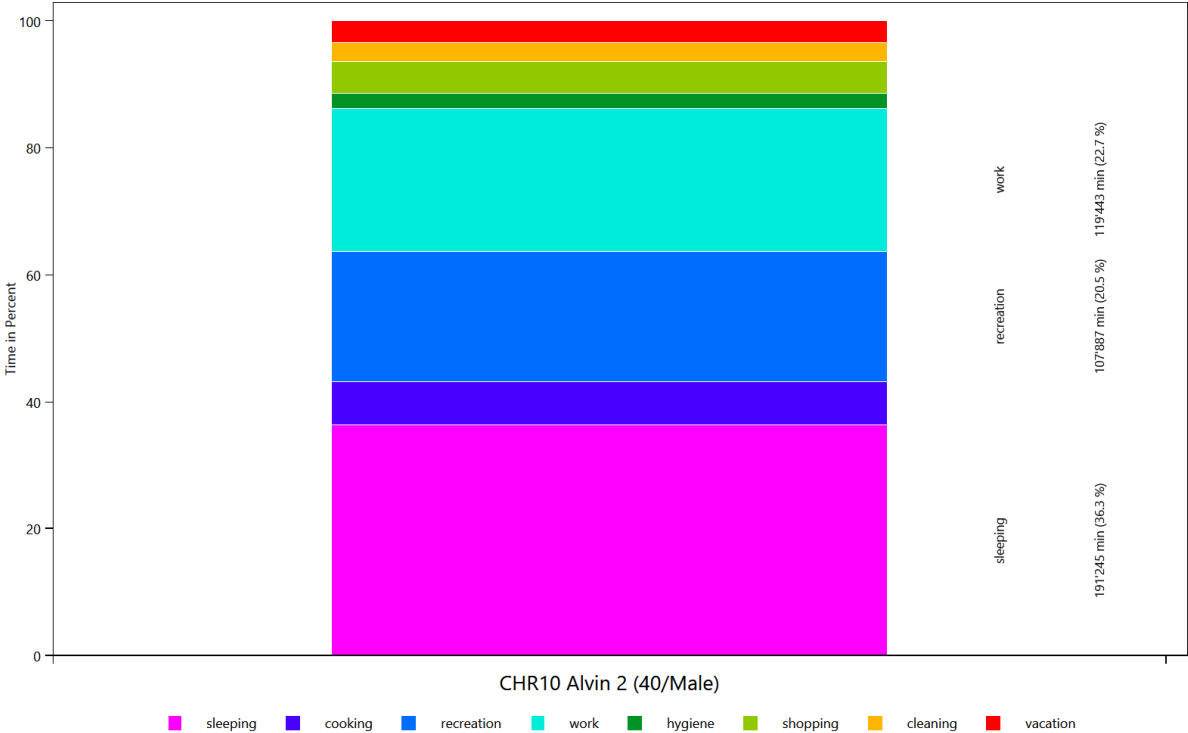


# Time Use per Person Per Affordance according to different category definitions

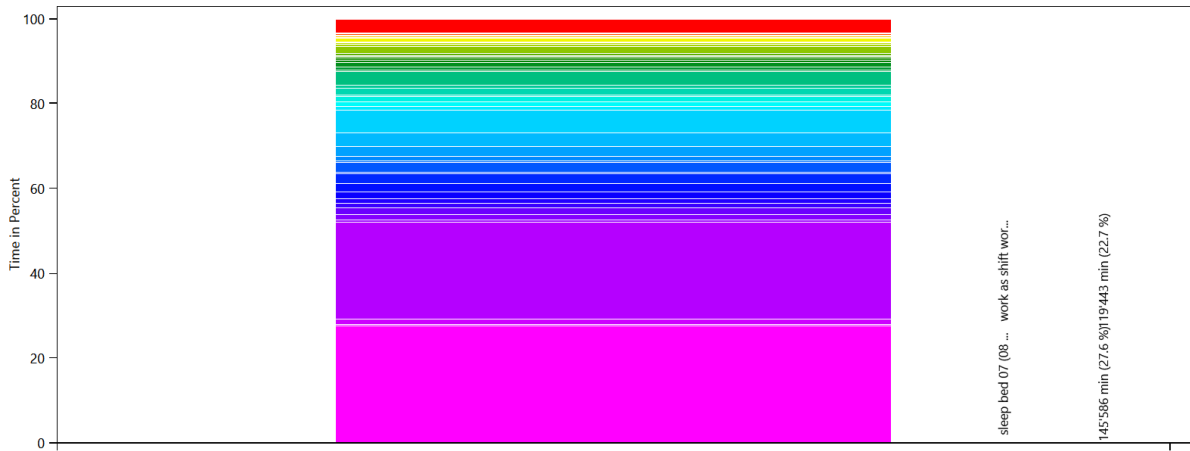
This is made from the files starting with: AffordanceTaggingSet

These charts show how the people in the household use their time. To help with analysis, the activities can be grouped by various criteria. This is done with the affordance tagging sets in the LPG.

## Basic Tagging - HH0



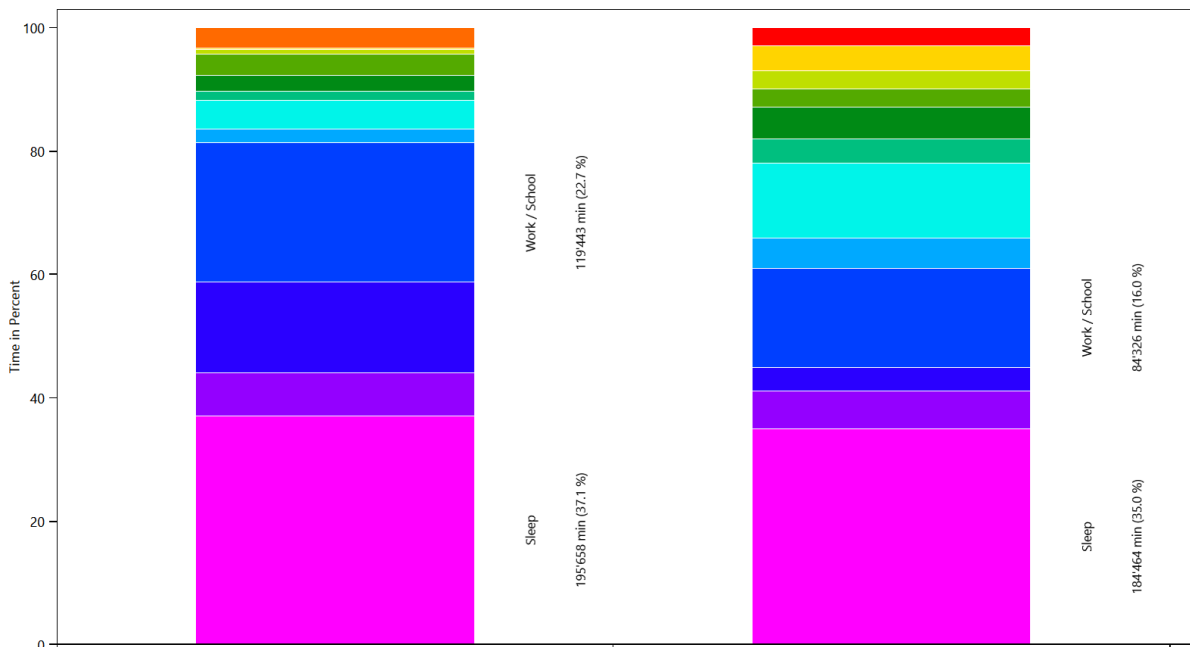
## Tagging Set For Planning - HHO



CHR10 Alvin 2 (40/Male)

- sleep bed 07 (08 h) (shift worker man)
- take a shower (men)
- exercise for 30 min on the treadmill
- play Xbox (1 h)
- take a long nap (shift worker)
- fry two eggs and eat them with toast
- run the dryer with wet laundry (by variable)
- cook food with rice and eat it
- cook a sunday feast with extractor hood and eat it
- make roulades and eat them
- heat up leftovers
- read a book on the couch only 9:00 to 22:00
- microwave frozen meal and eat it
- go shopping for food in the supermarket (1.5 h)
- use the computer for recreation (2 h)
- use the computer (1 h)
- use the computer with external HD (1 h)
- cook food with steam cooker and eat it
- cook food with a deep fryer and eat it
- make soup
- watch TV (1 h)
- make custom pizza and eat it
- eat breakfast (1 h)
- watch sports on TV with SAT Reciever (2 h)
- watch a movie for 1 h 30 min
- sweep the floors
- vacuum the household
- go to a bar (4 h)
- clean the windows
- make and drink tea (15 min)
- read a magazine
- work as shift worker (man)
- rest for 10 min
- get ready in the morning (men)
- watch a movie for 2 h
- do laundry at 30°C (by variable)
- listen to music on compact hifi (2 h)
- make fondue and eat it
- do laundry at 60°C (by variable)
- read a newspaper for 30min
- read a book on the couch all the time
- take nap on the weekend (2 h)
- go to the toilet
- clean the bath
- go shopping (4 h)
- watch a movie for 2 h
- take a nap
- use the computer (2 h)

## Wo bleibt die Zeit - HHO



CHR10 Alvin 2 (40/Male)

Reference

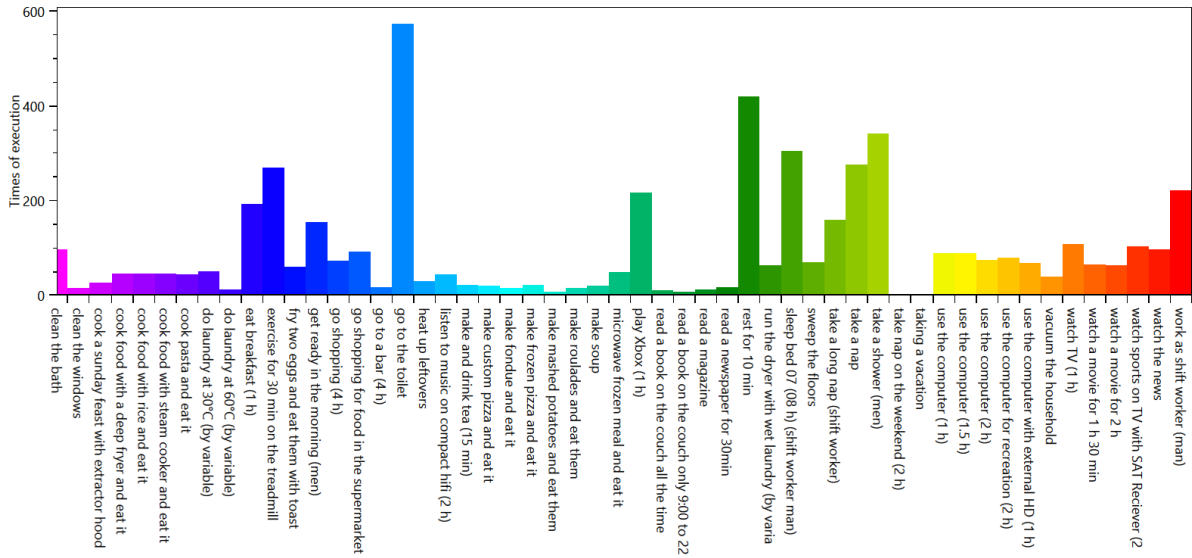
- Sleep
- Food
- Media Use
- Work / School
- Hygiene
- Unpaid Work
- Sport
- Games
- Entertainment
- Events
- Hobby
- vacation
- Contacts

# Overview of the actions of each member of the household

This is made from the files starting with: ExecutedActionsOverviewCount

These charts show how often each affordance was executed.

HH0 - CHR10 Alvin 2 (40 Male)

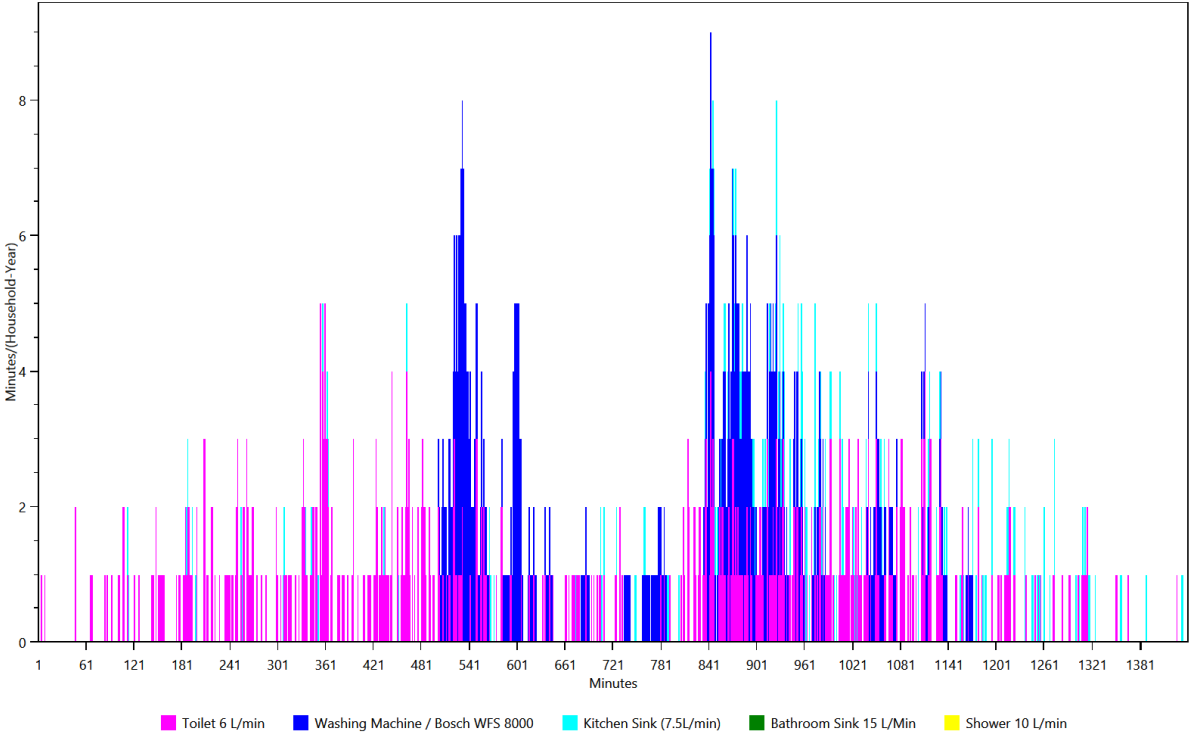


# Overview of the time of the use per load type per device

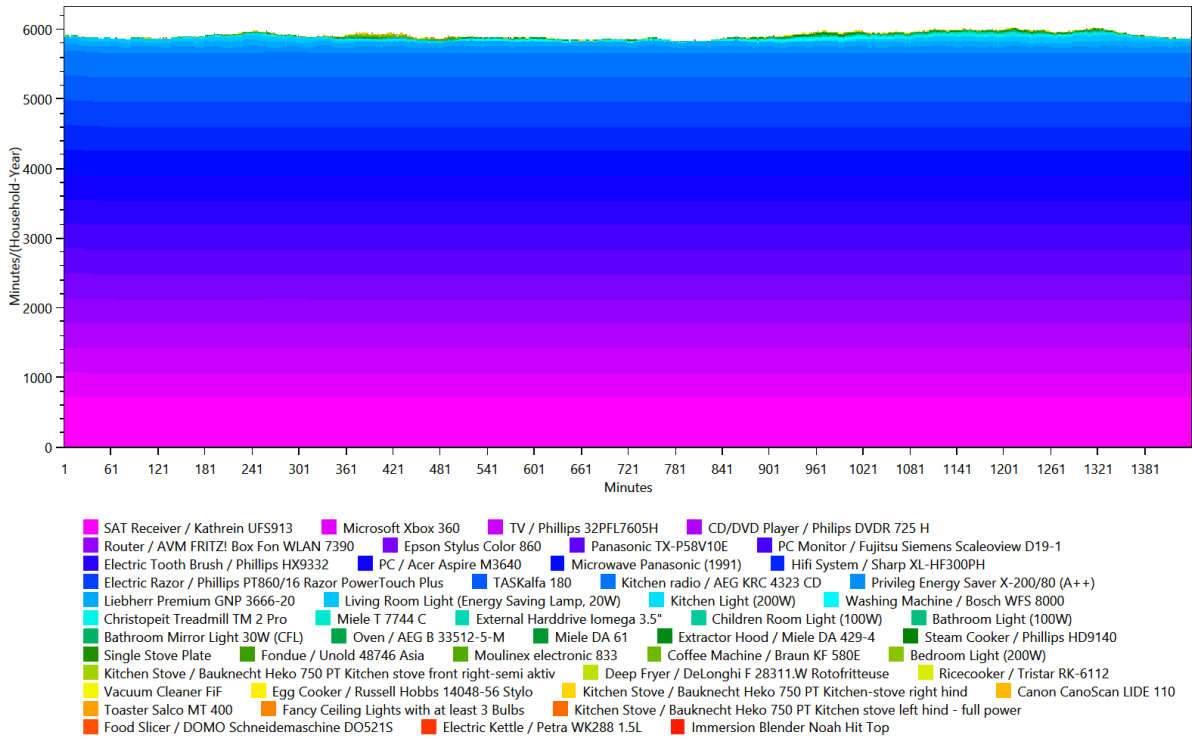
This is made from the files starting with: TimeOfUseEnergyProfiles

The time of use energy profiles shows when each device was used.

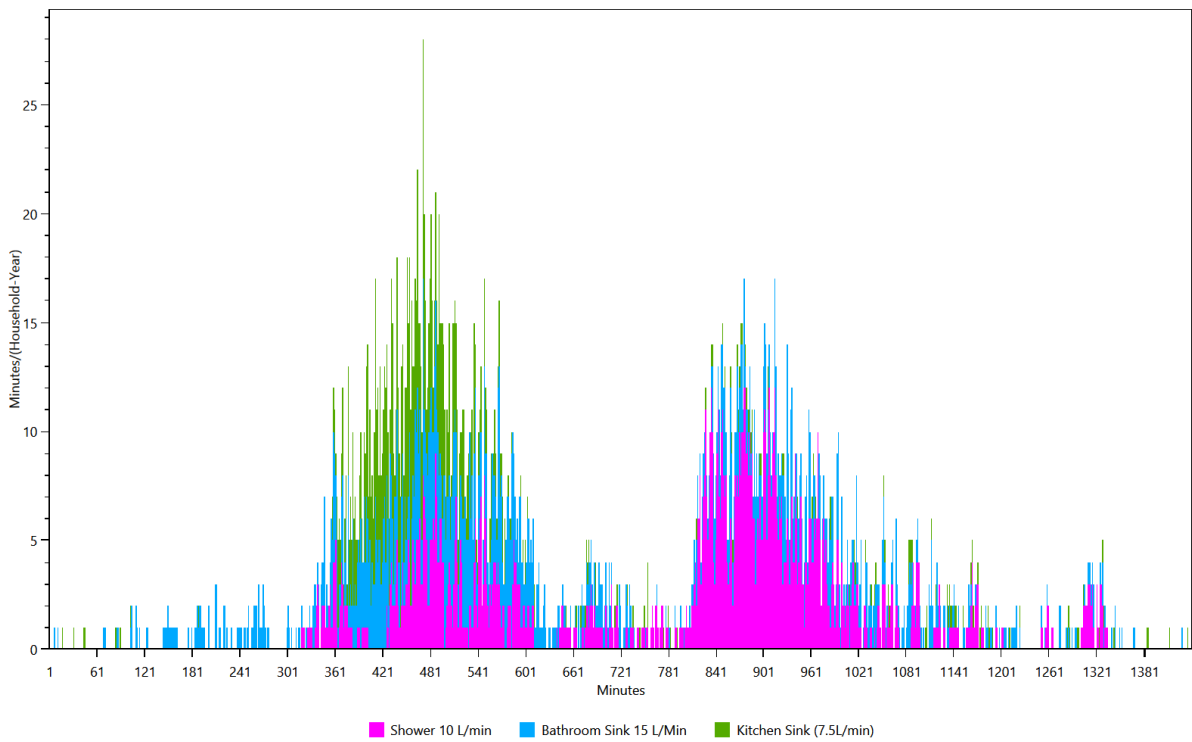
## Cold Water



## Electricity



## Warm Water



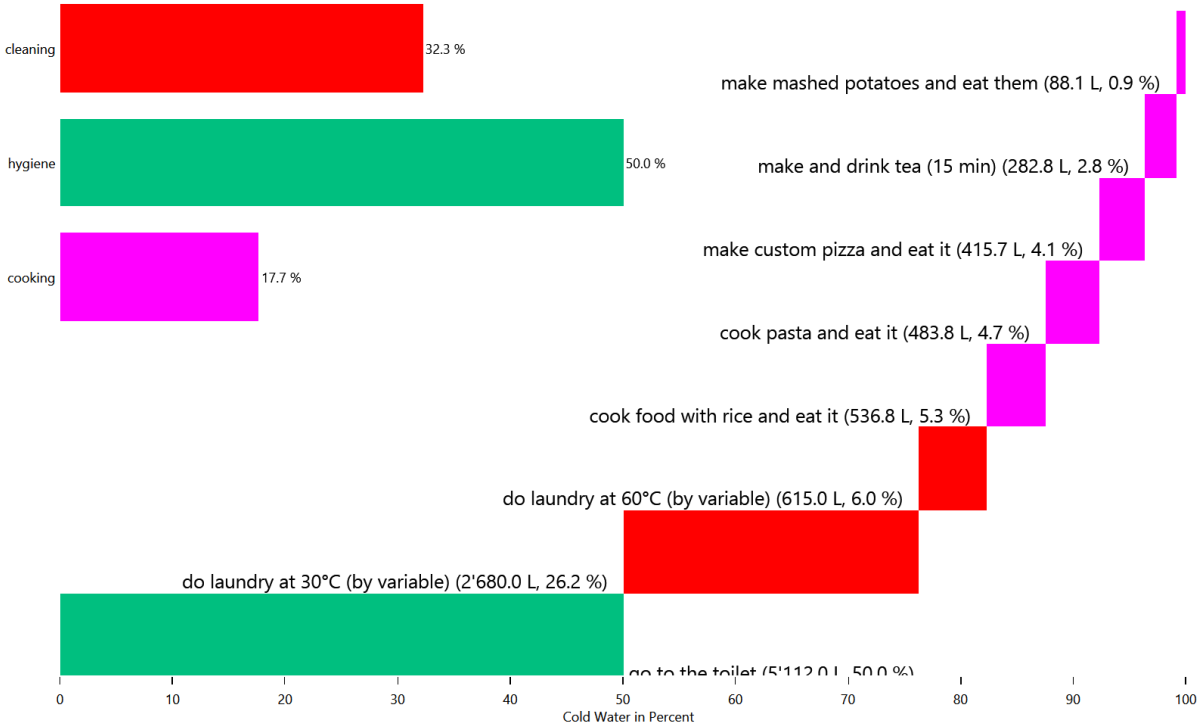


# Energy/Resource use distribution per load type per affordance

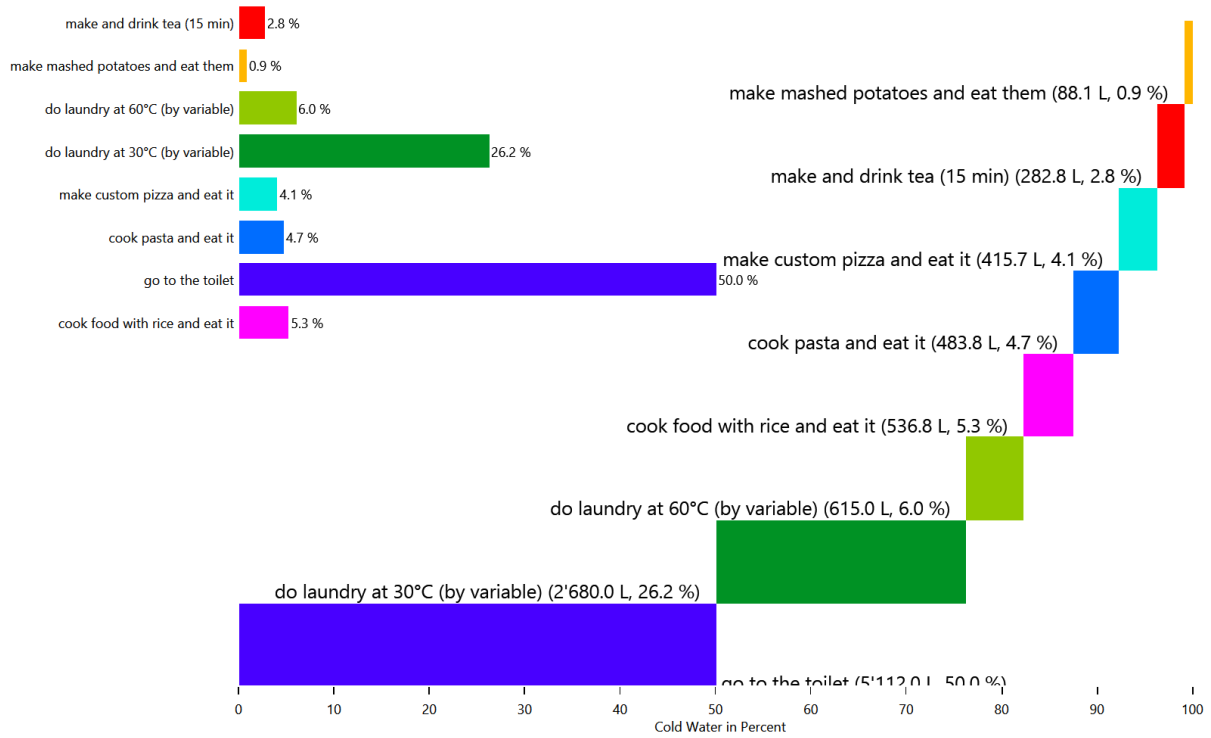
This is made from the files starting with: AffordanceEnergyUse

This shows the distribution of the energy/ressource use to each affordance by load type.

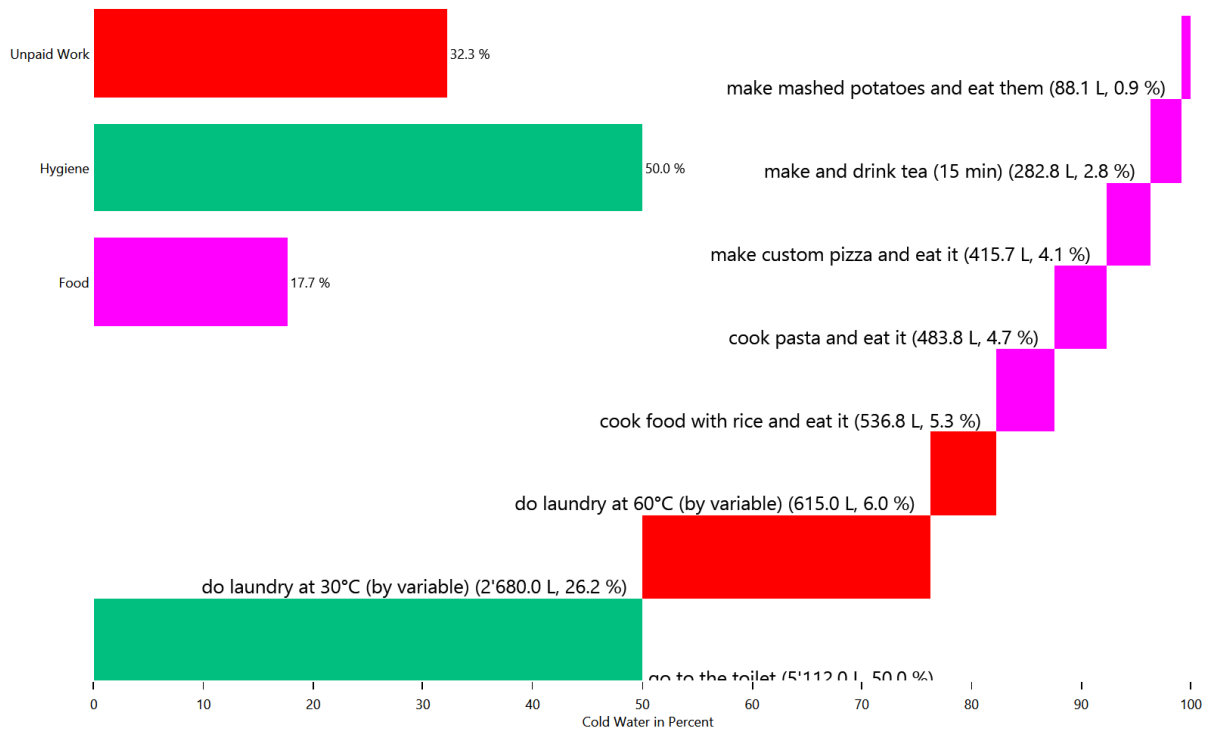
## HH0 - Cold Water



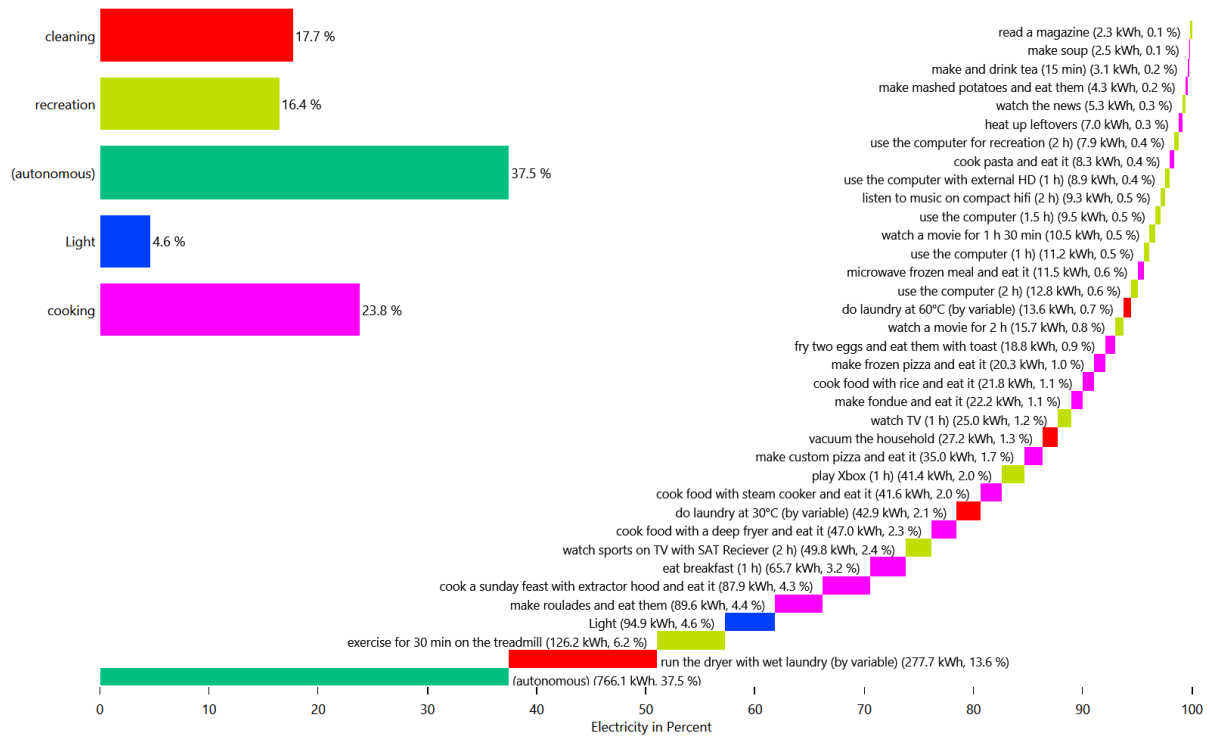
## HH0 - Cold Water



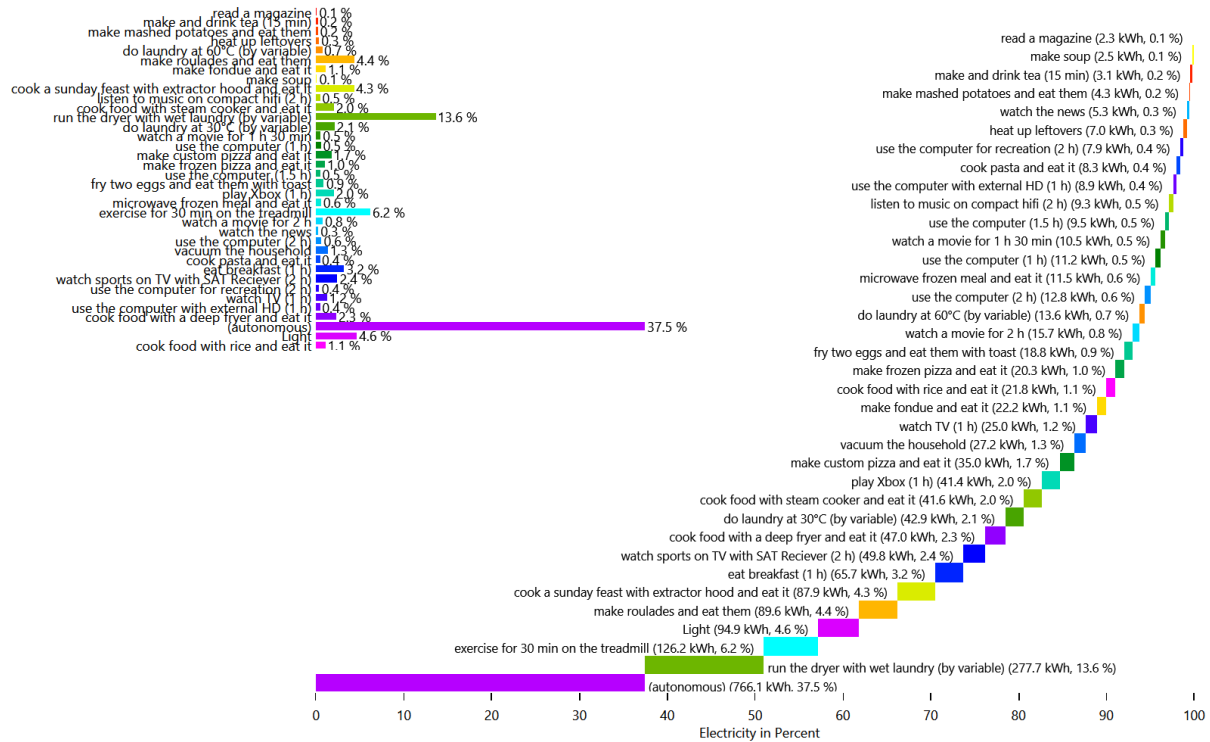
## HH0 - Cold Water



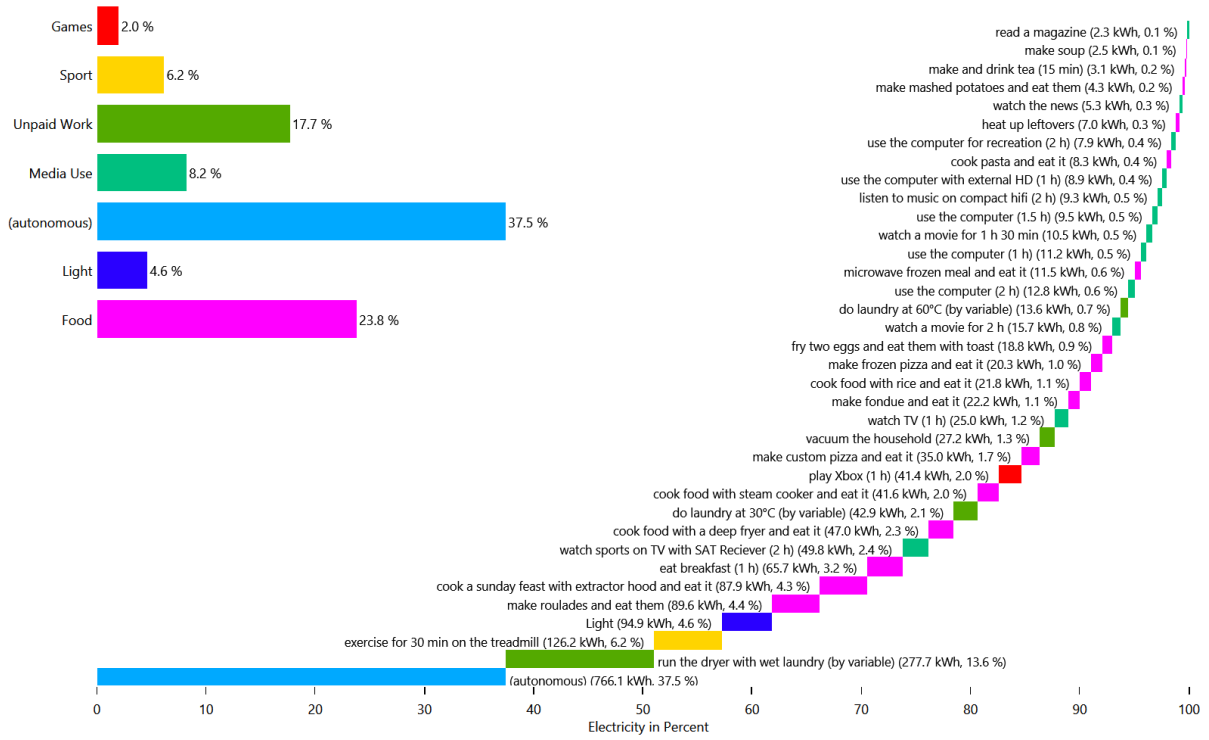
# HH0 - Electricity



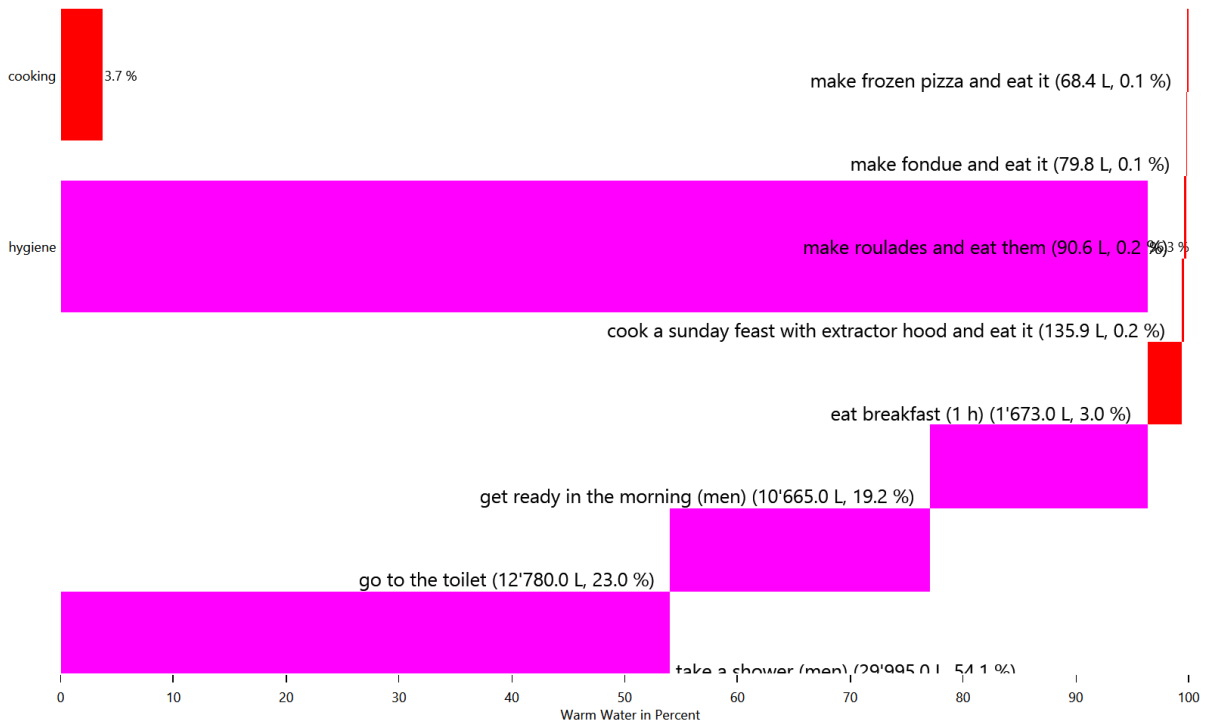
# HH0 - Electricity



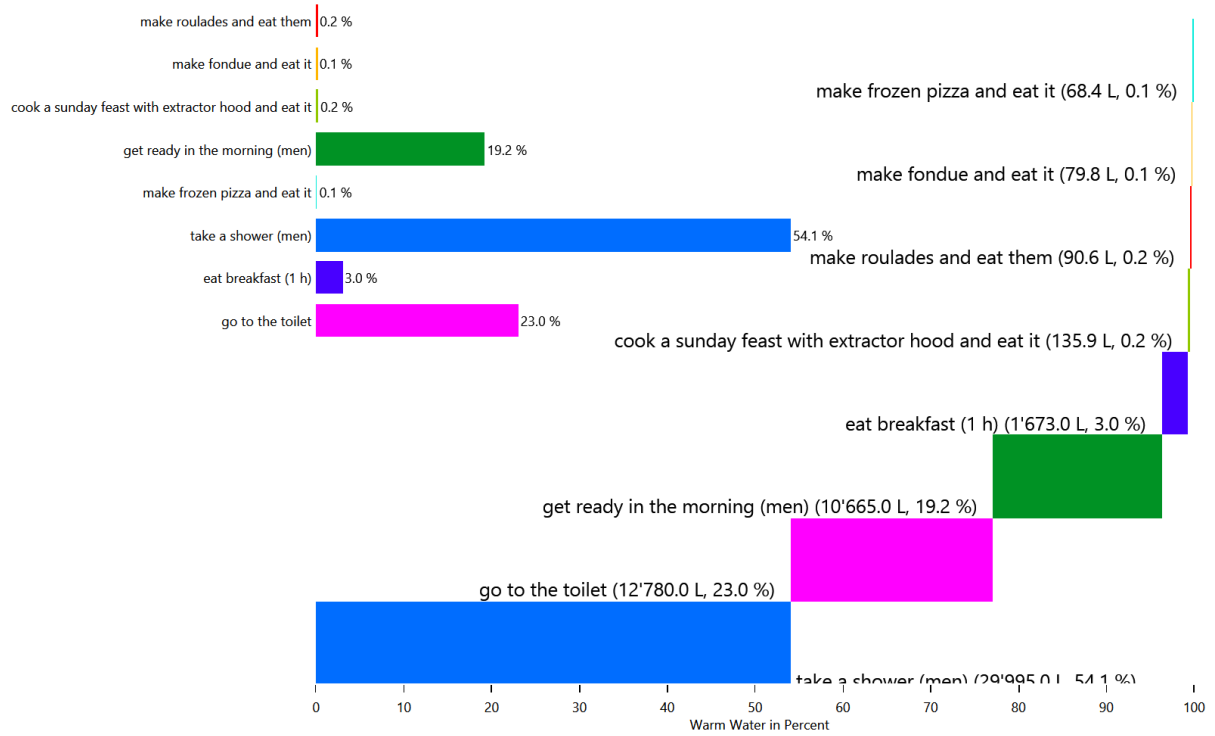
## HH0 - Electricity



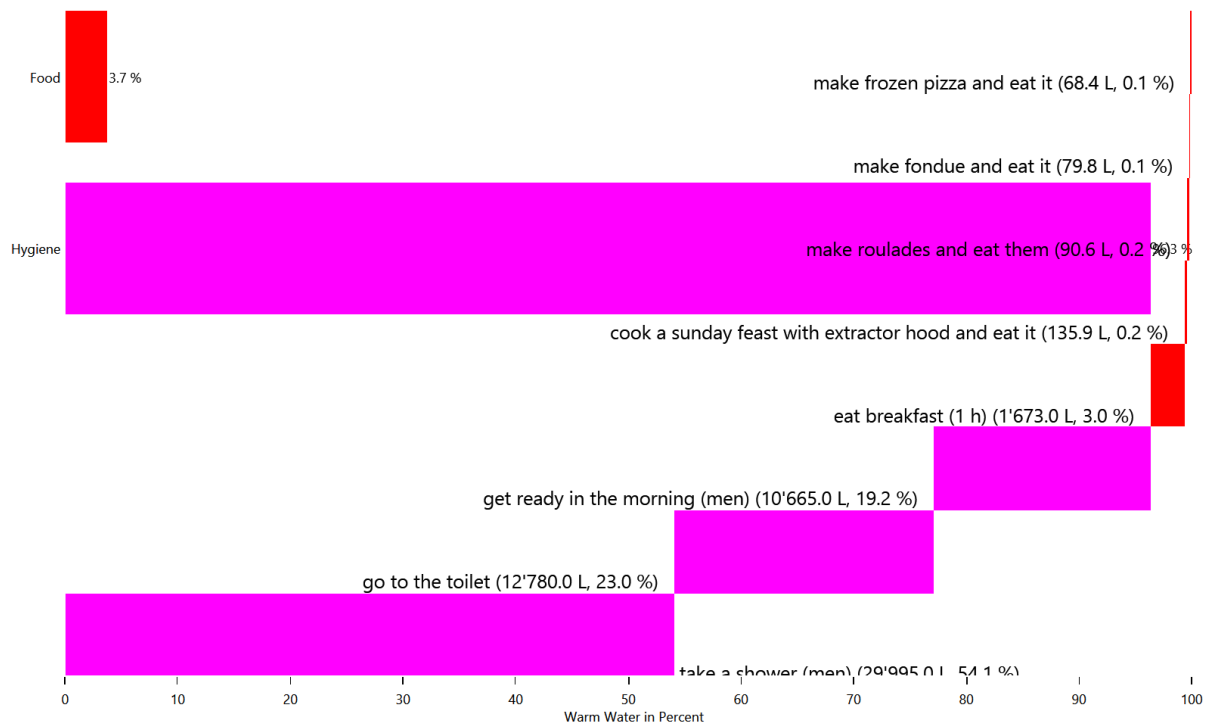
## HH0 - Warm Water



## HH0 - Warm Water



## HH0 - Warm Water

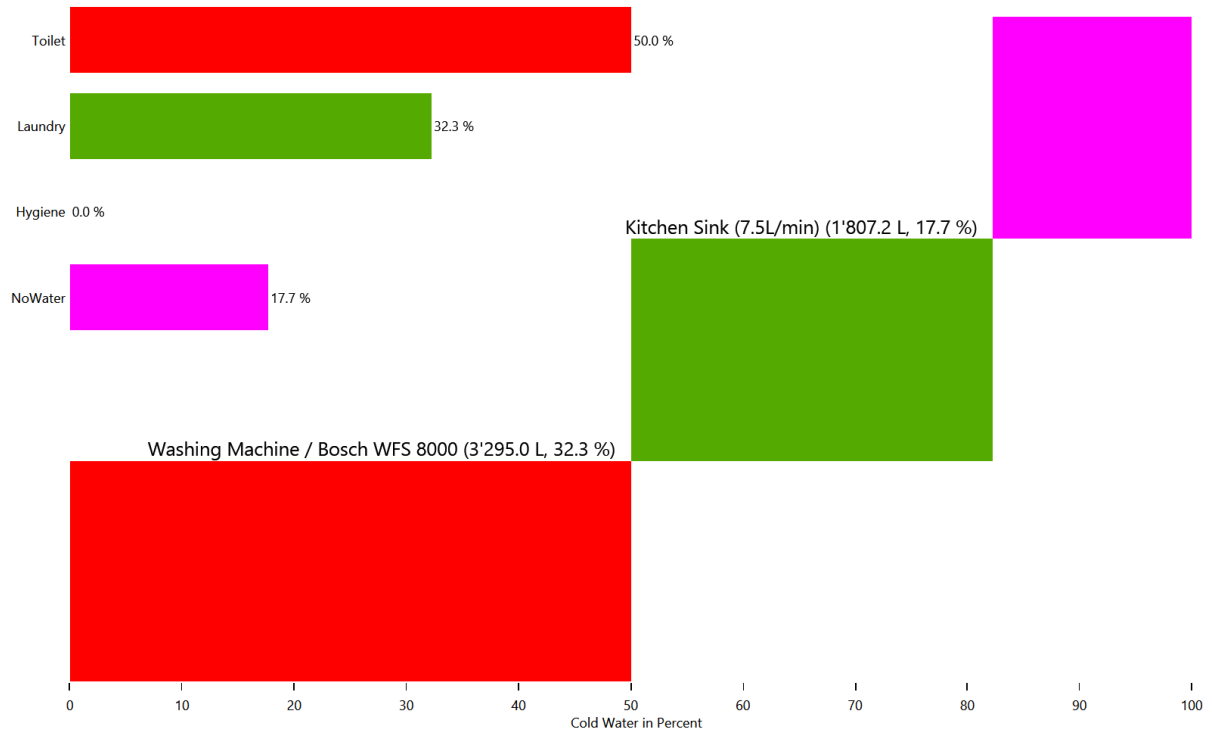


# Energy use for each load type for each device

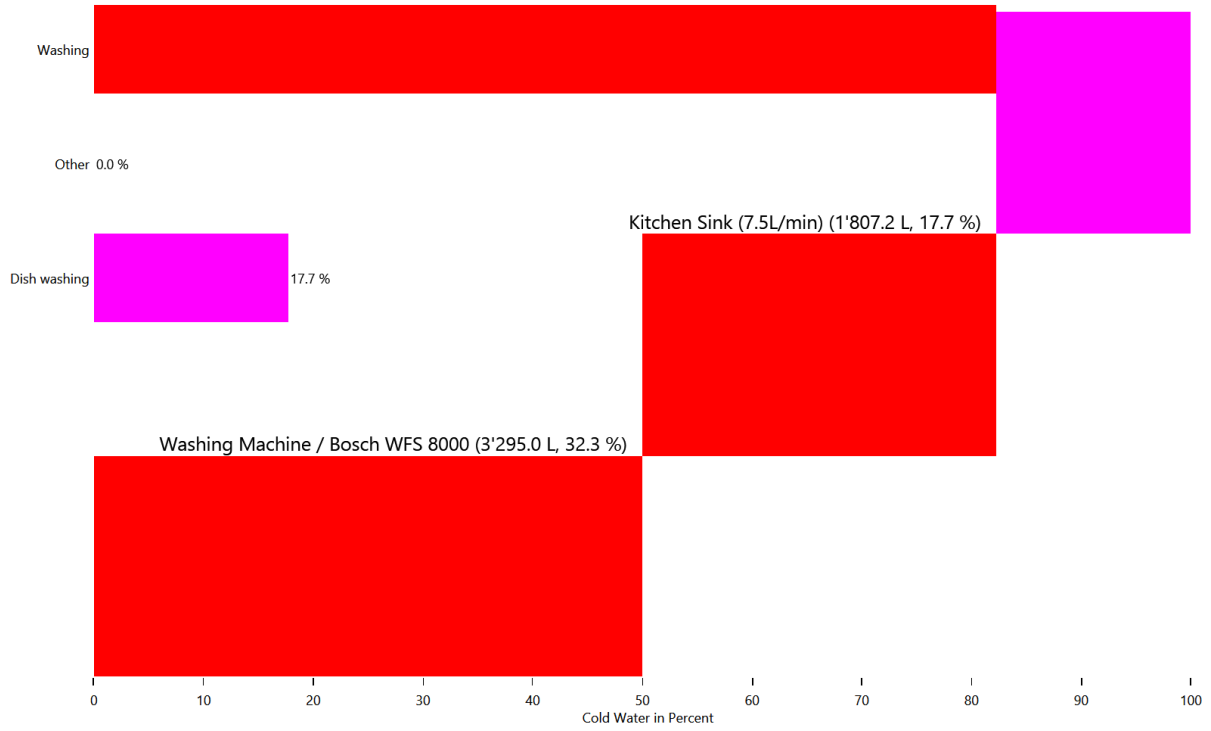
This is made from the files starting with: DeviceSums

These pie charts show the energy use for each individual device in each load type.

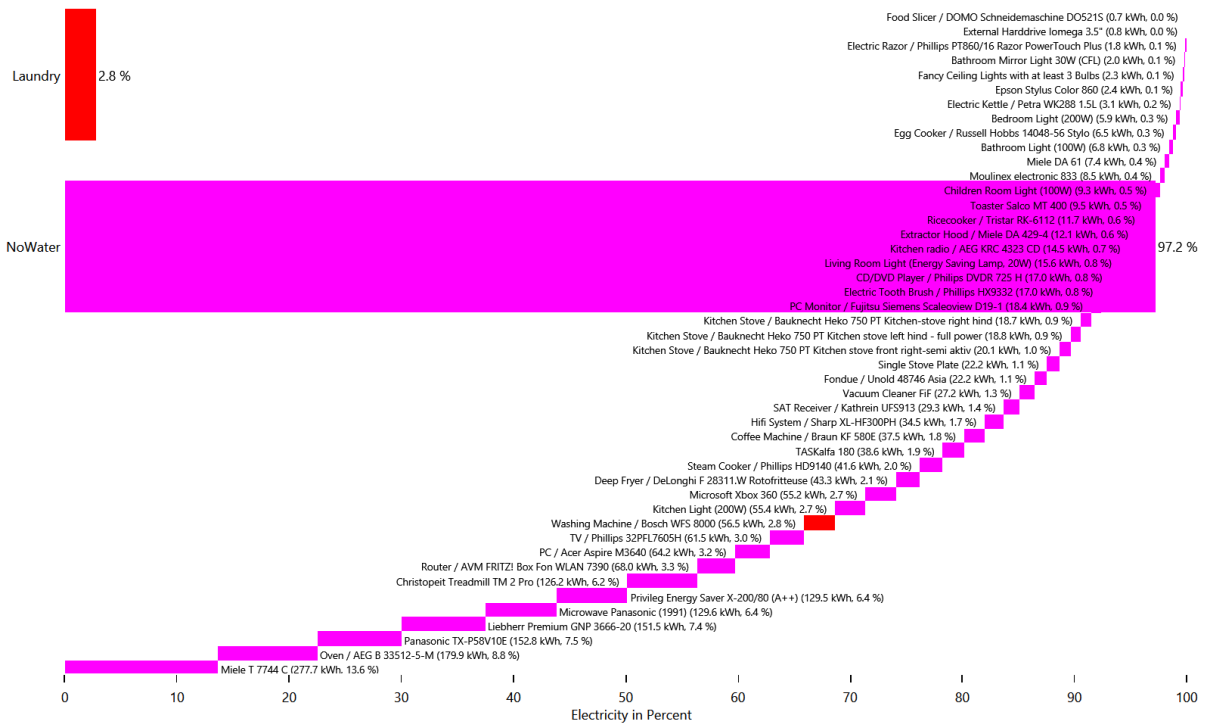
## Cold Water



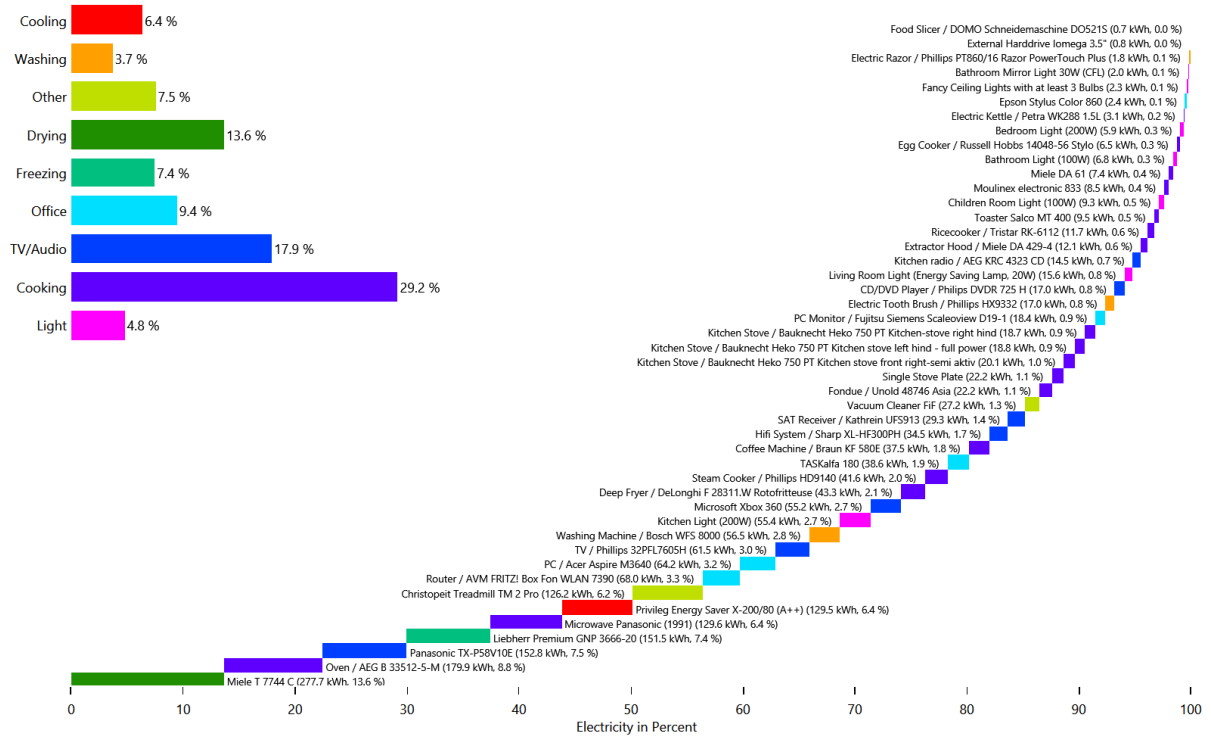
## Cold Water



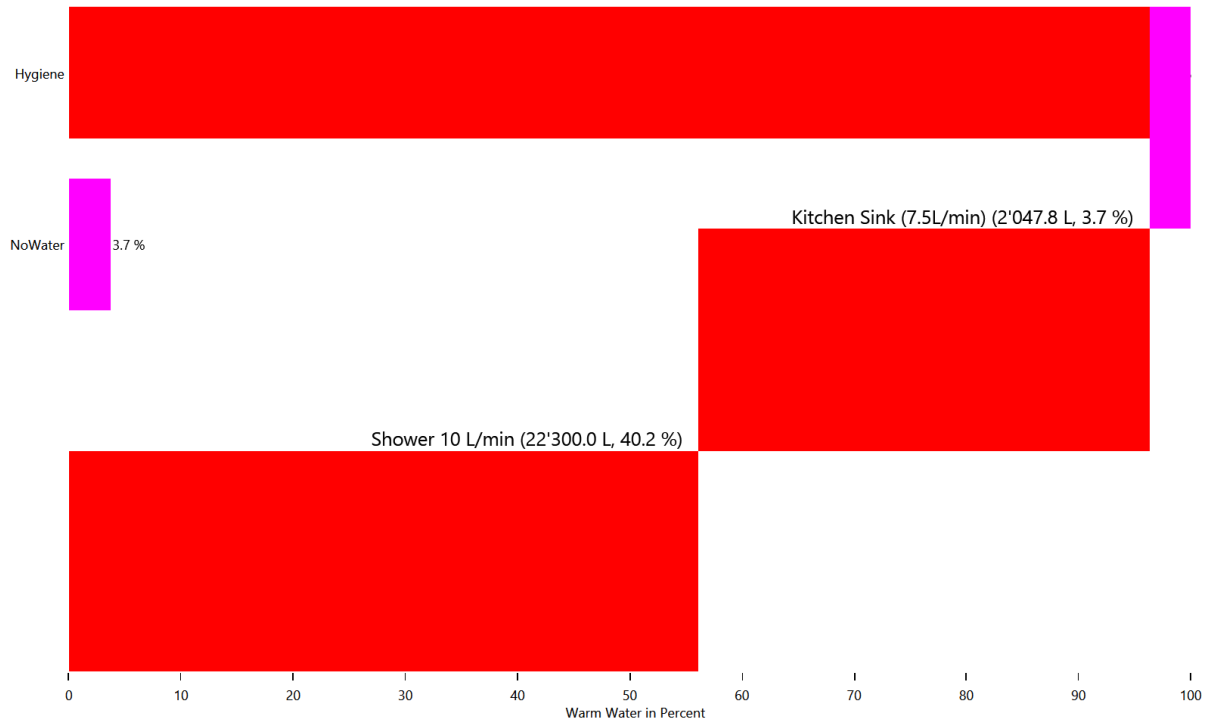
## Electricity



# Electricity

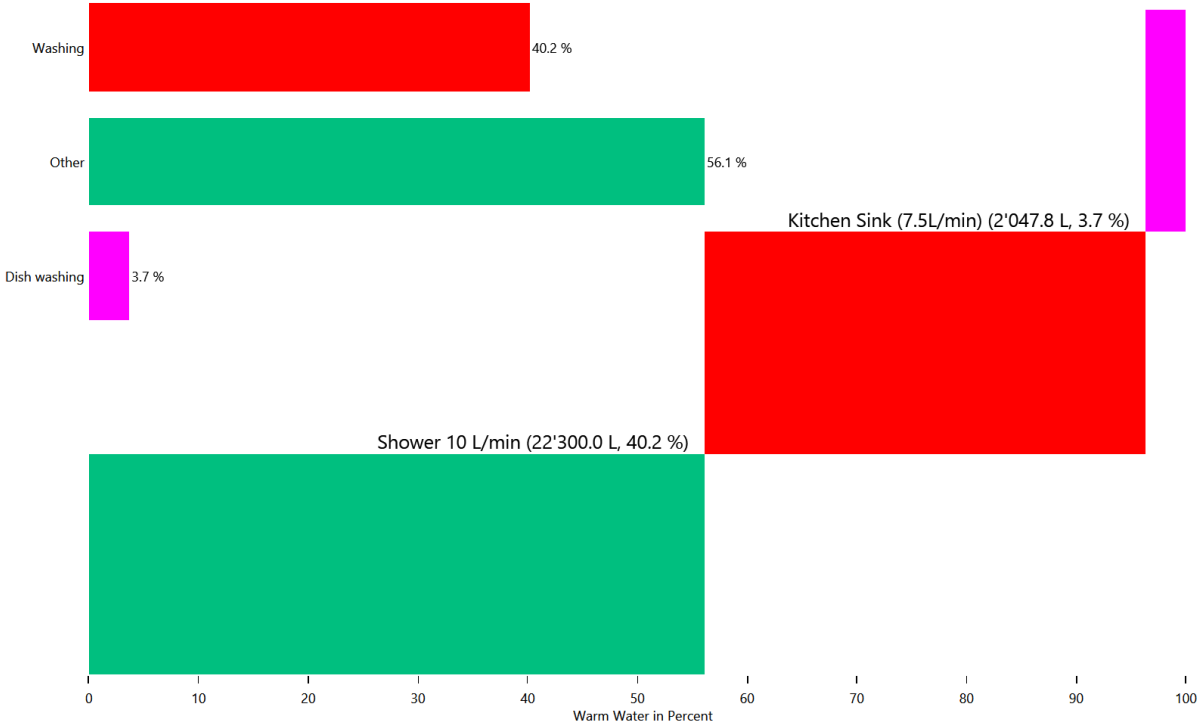


# Warm Water





# Warm Water

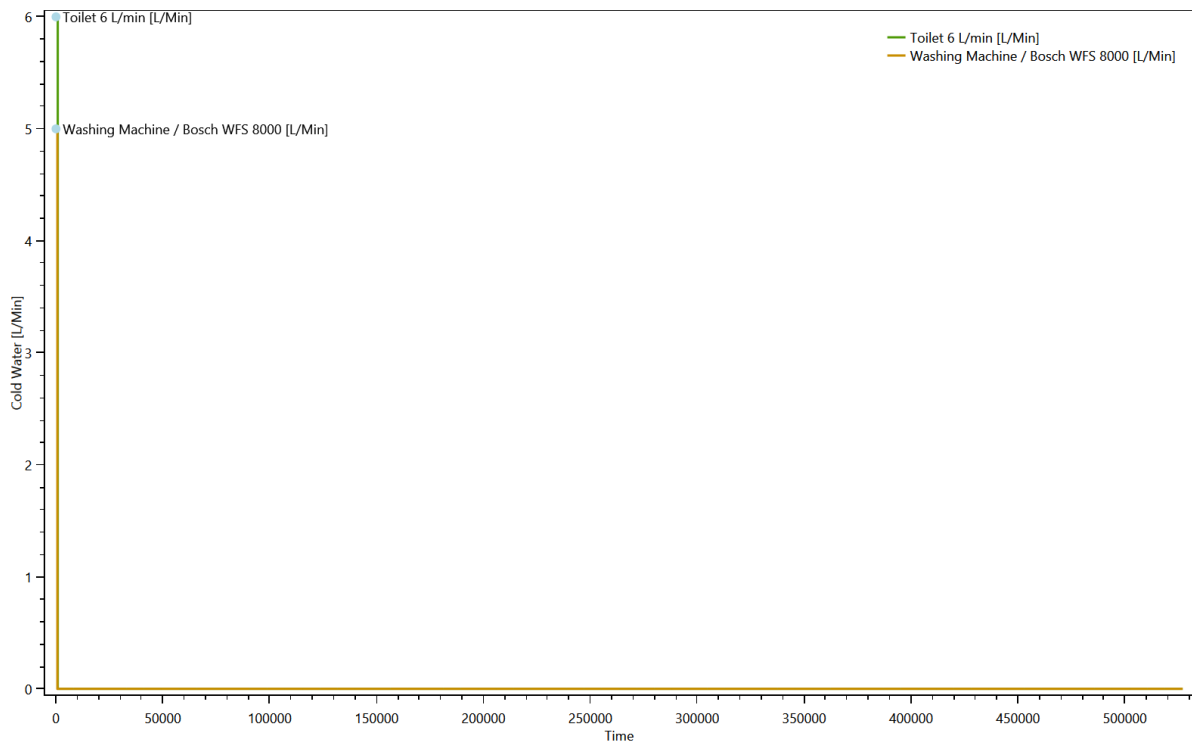


# Duration curve for each device for each load type

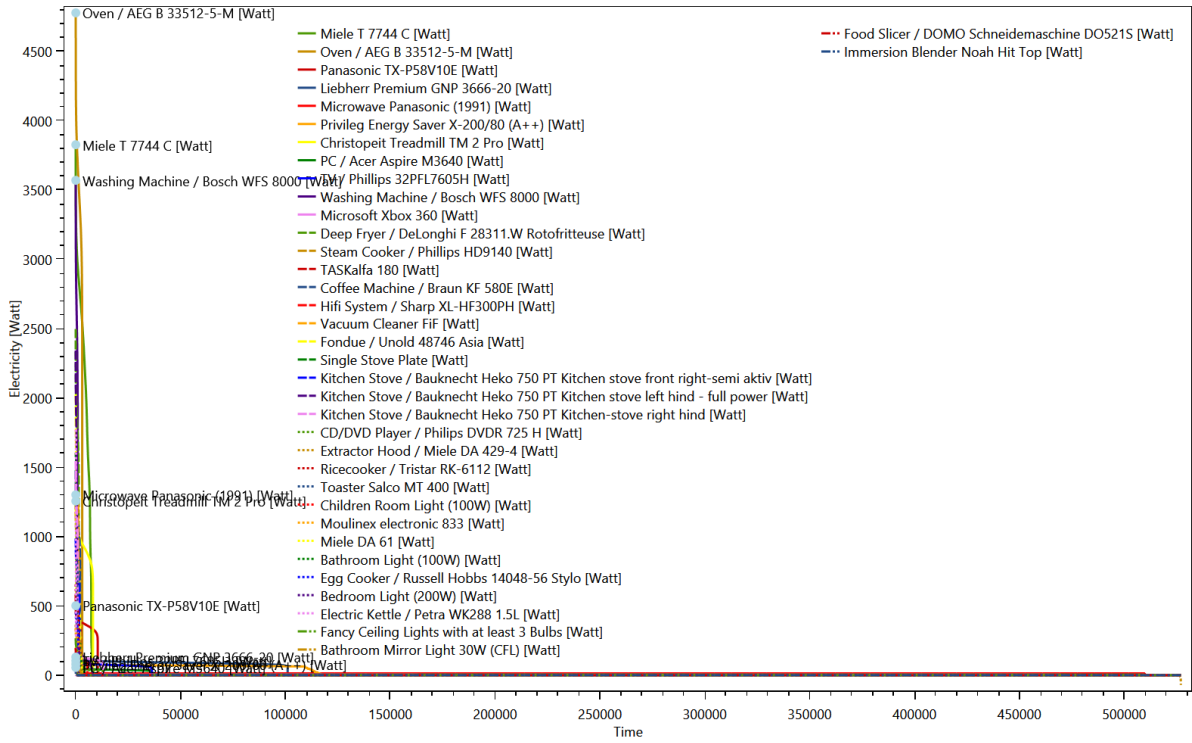
This is made from the files starting with: DeviceDurationCurves

The device duration curve show the duration curve of each device to give an overview of the power consumption.

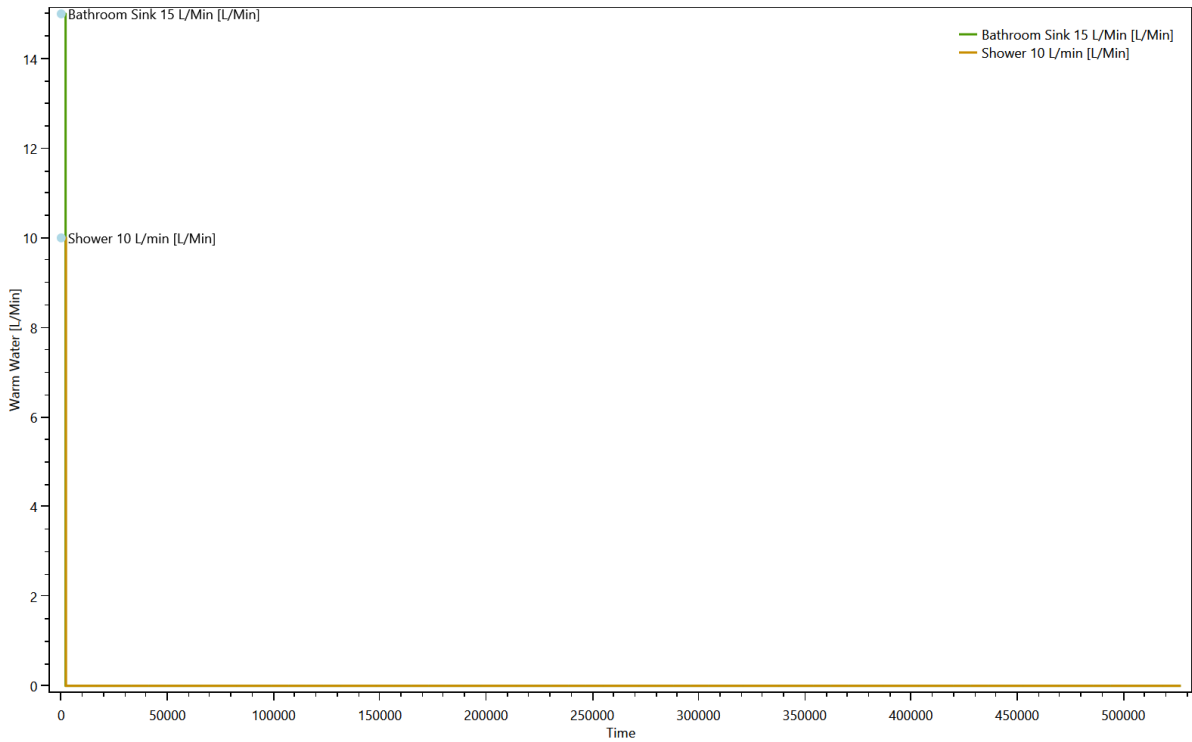
## Cold Water



## Electricity



## Warm Water

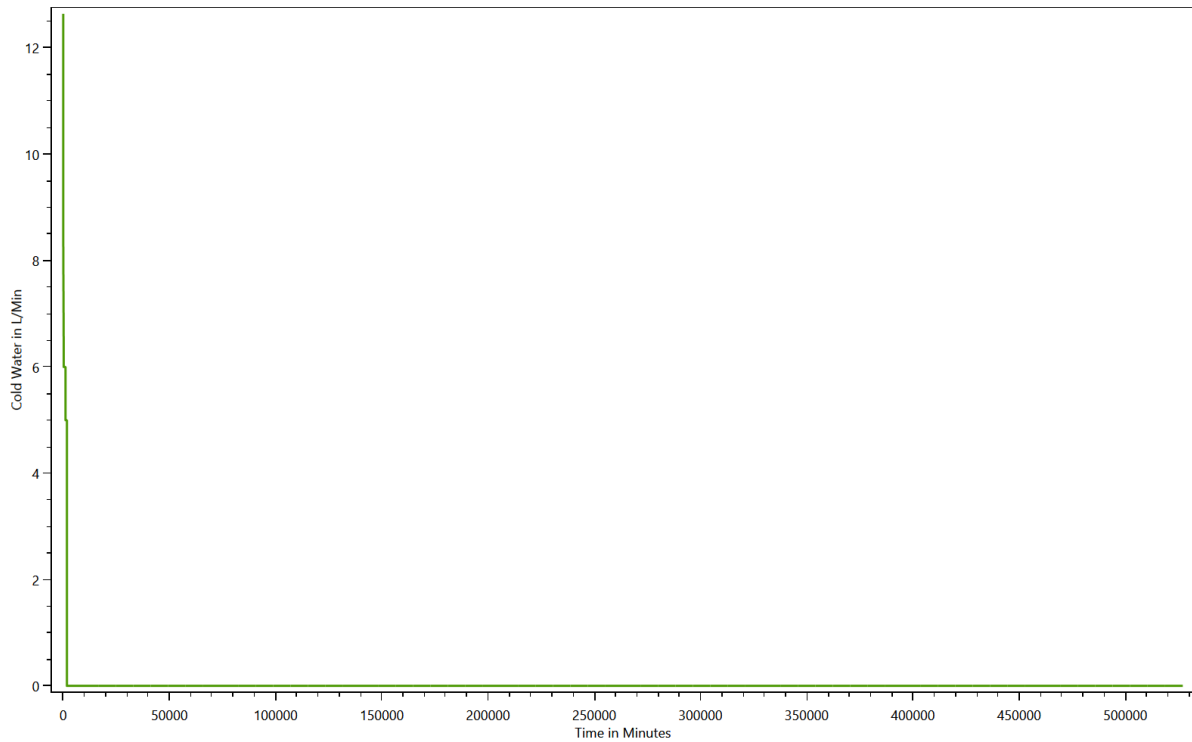


# Duration curve for each load type

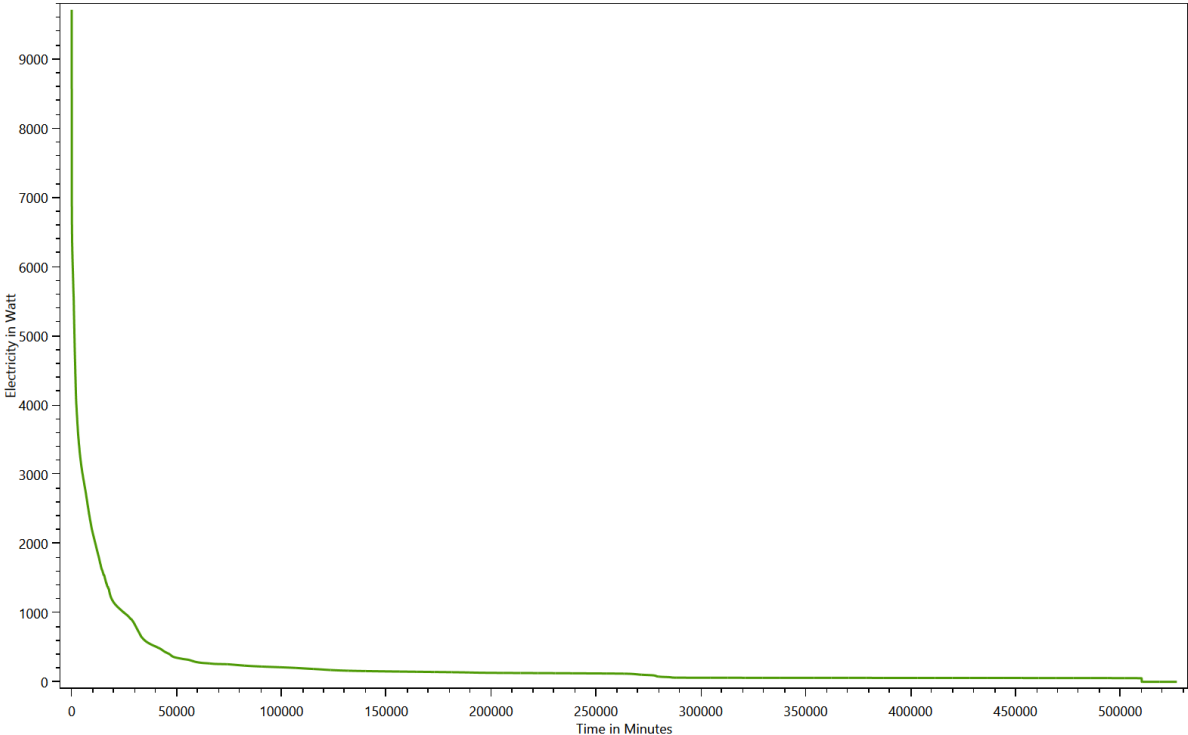
This is made from the files starting with: **DurationCurve**

The duration curve show the duration curve for the entire household to give an overview of the power consumption.

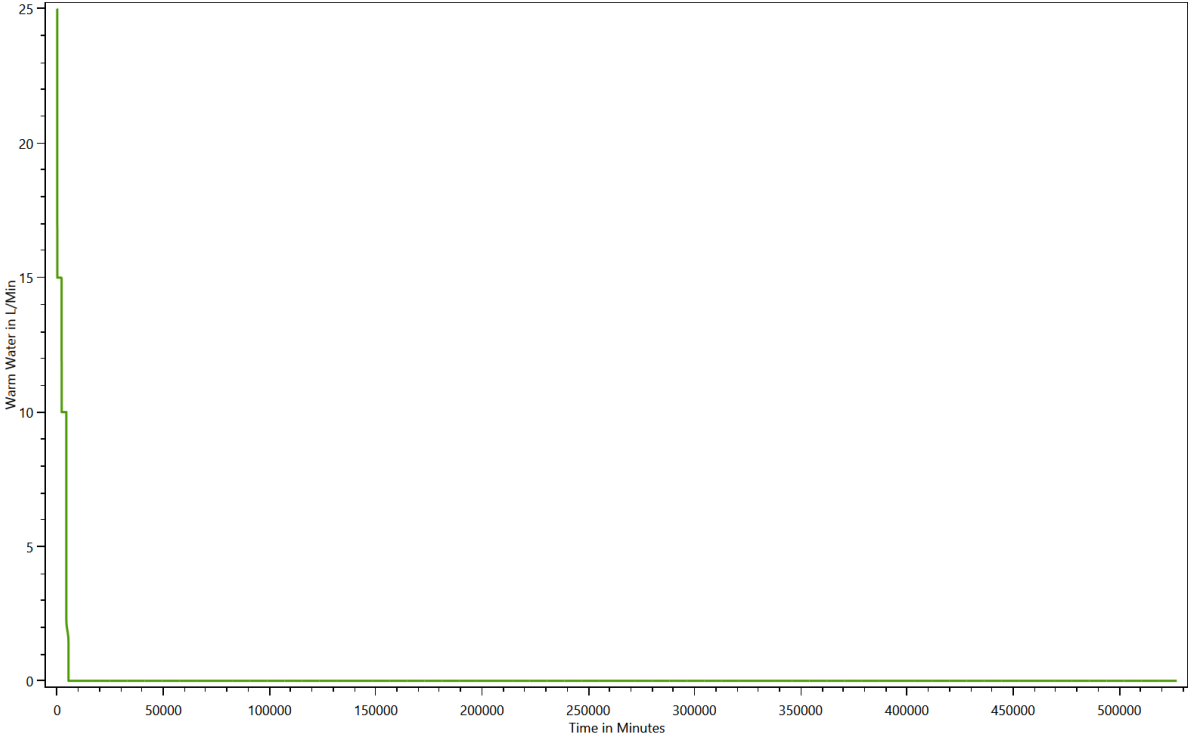
## Cold Water



# Electricity



# Warm Water

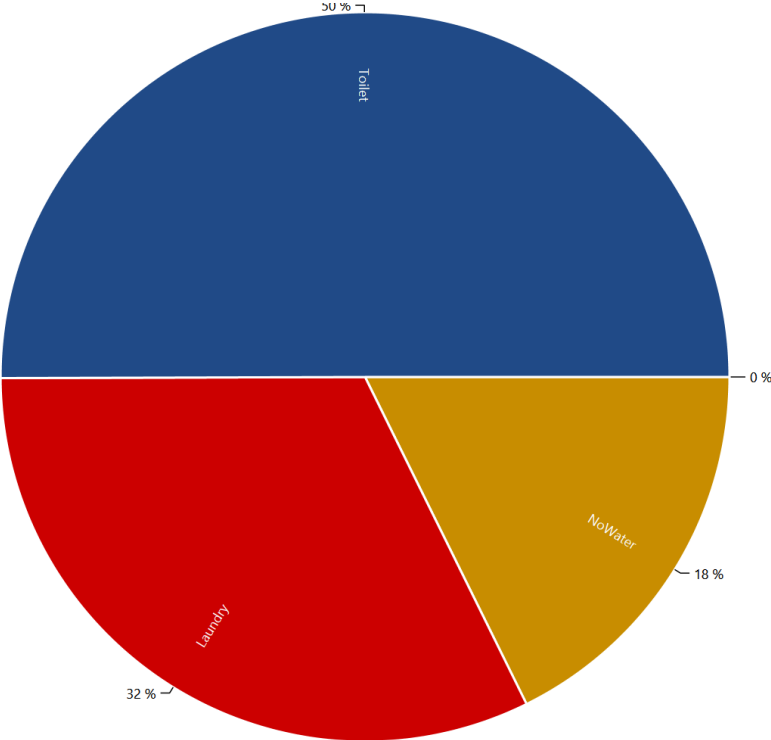


# Grouped energy use for each load type for each device

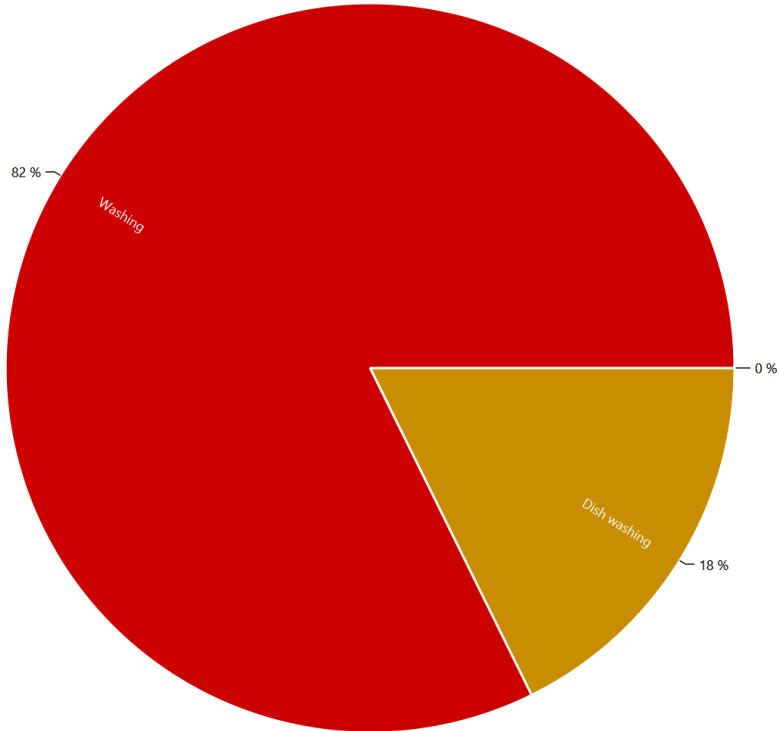
This is made from the files starting with: DeviceTaggingSet

The devices in the LPG can be grouped with various criteria by the device tagging sets. These charts show the results.

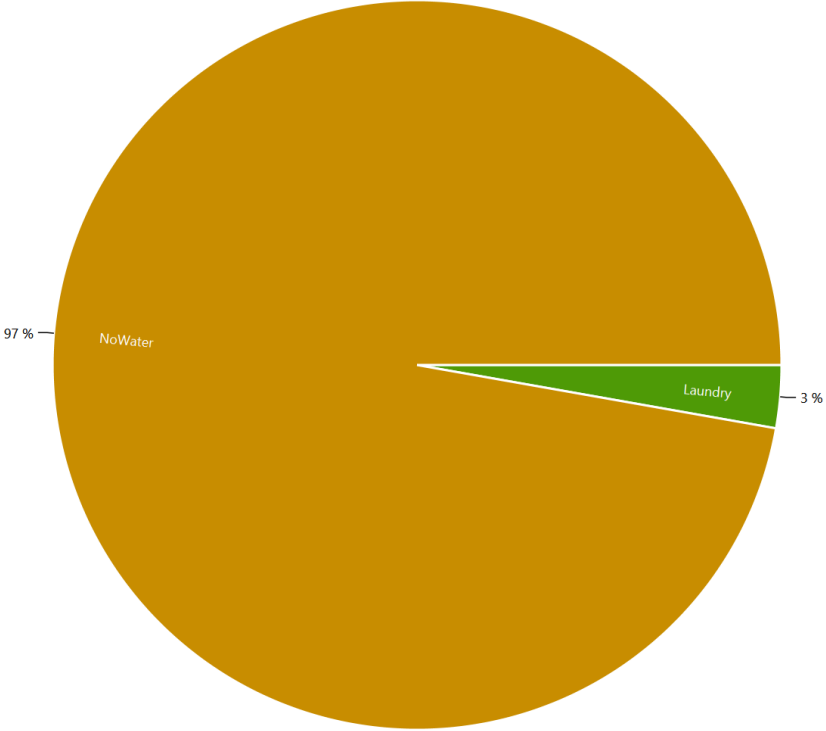
## HH0 - Destatis Water Usage Statistics - Cold Water



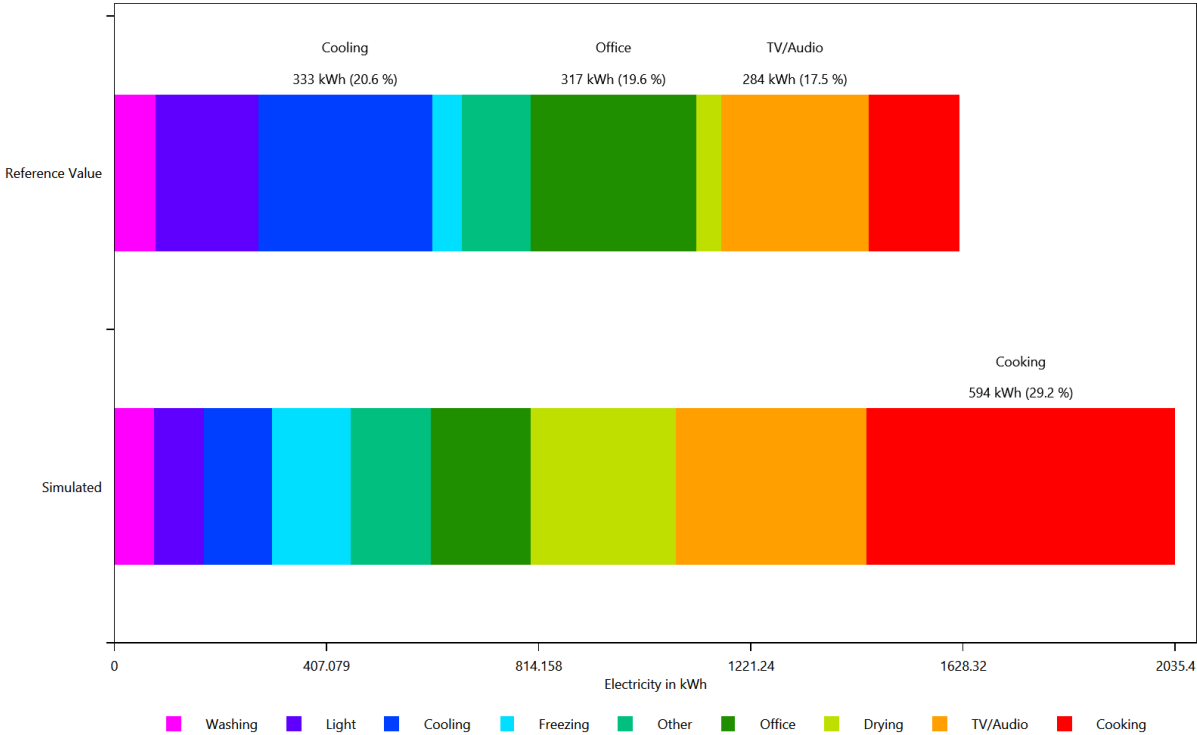
HH0 - Energieagentur - Cold Water



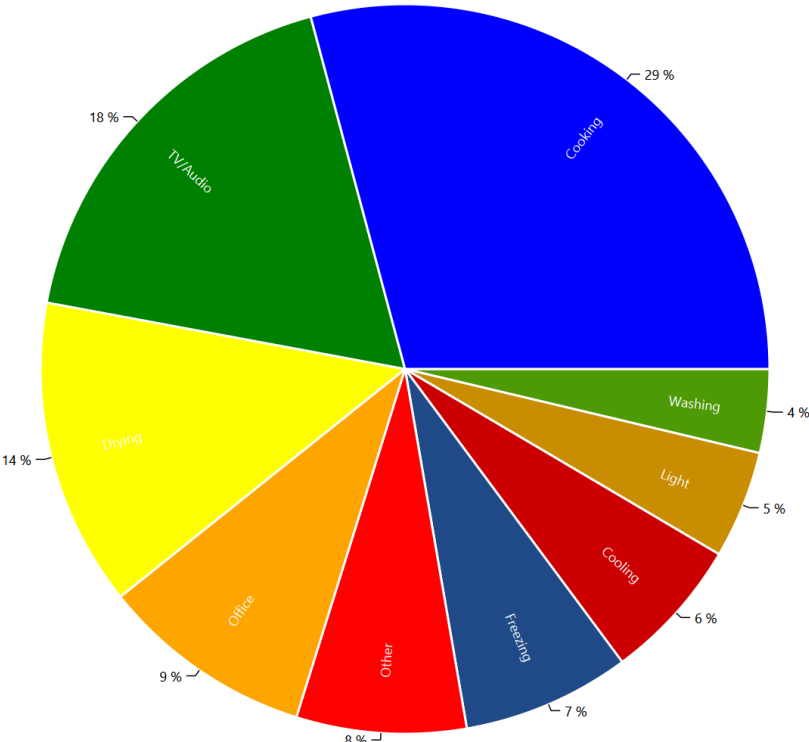
HH0 - Destatis Water Usage Statistics - Electricity



# HH0 - Energieagentur - Electricity

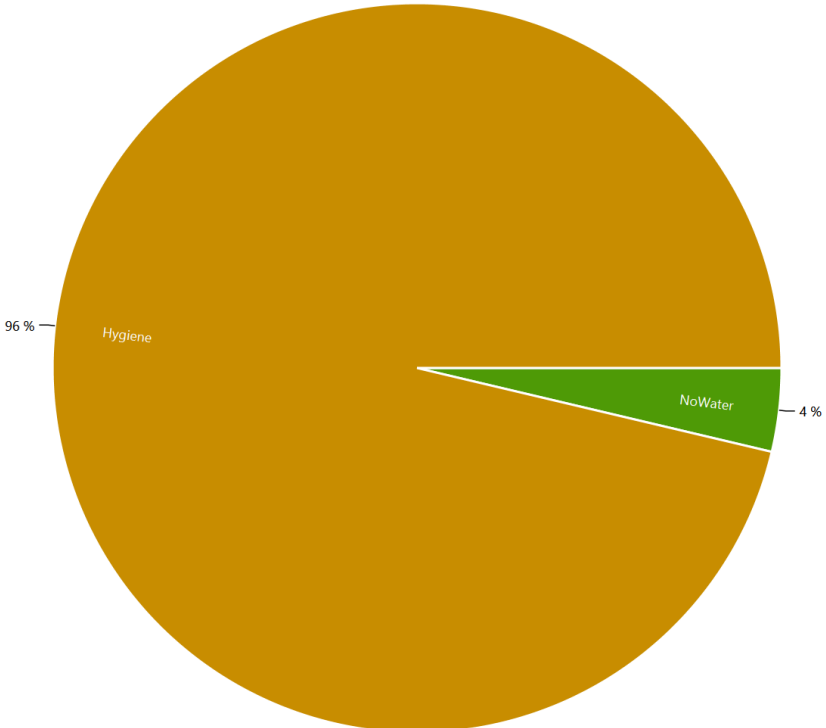


# HH0 - Energieagentur - Electricity

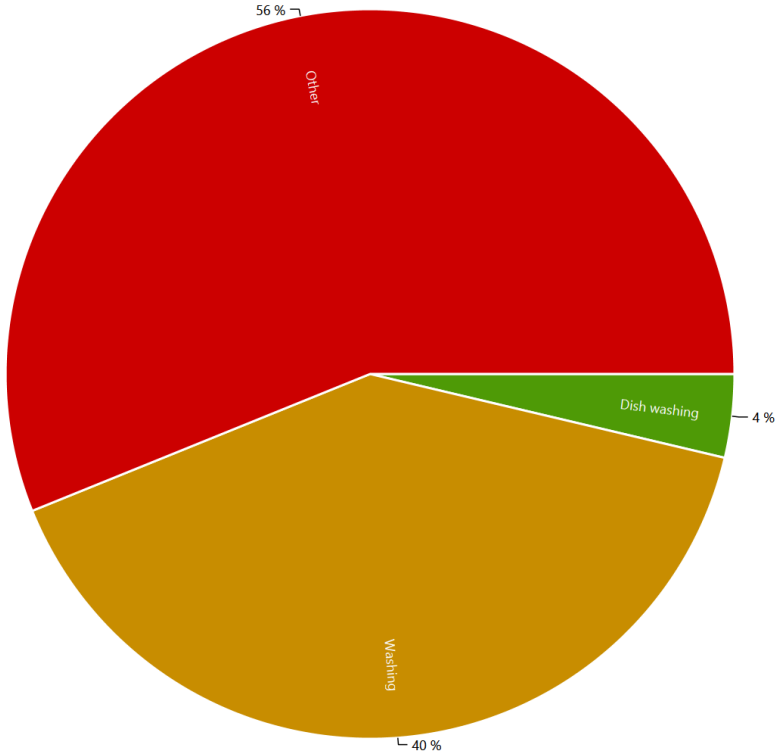




HH0 - Destatis Water Usage Statistics - Warm Water



HH0 - Energieagentur - Warm Water

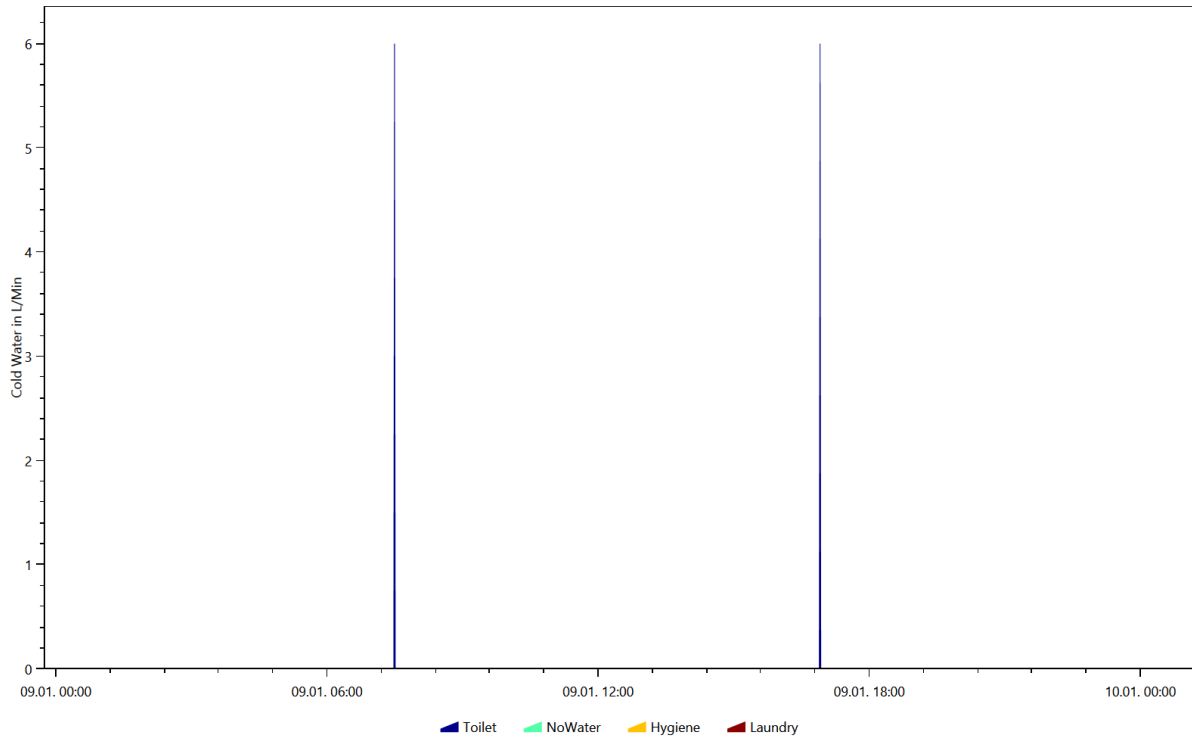


# Example of the device profiles for each load type

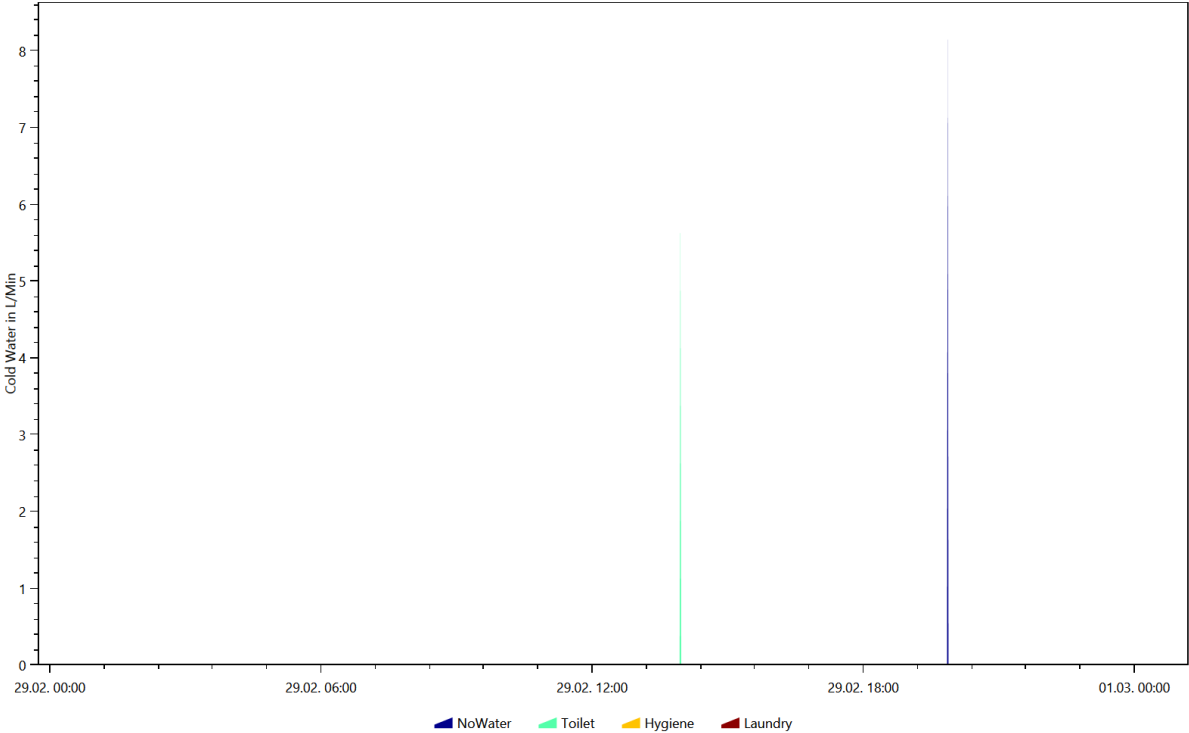
This is made from the files starting with: DeviceProfiles

The device profile files are the reason for the LPG. They show the power consumption of each device.

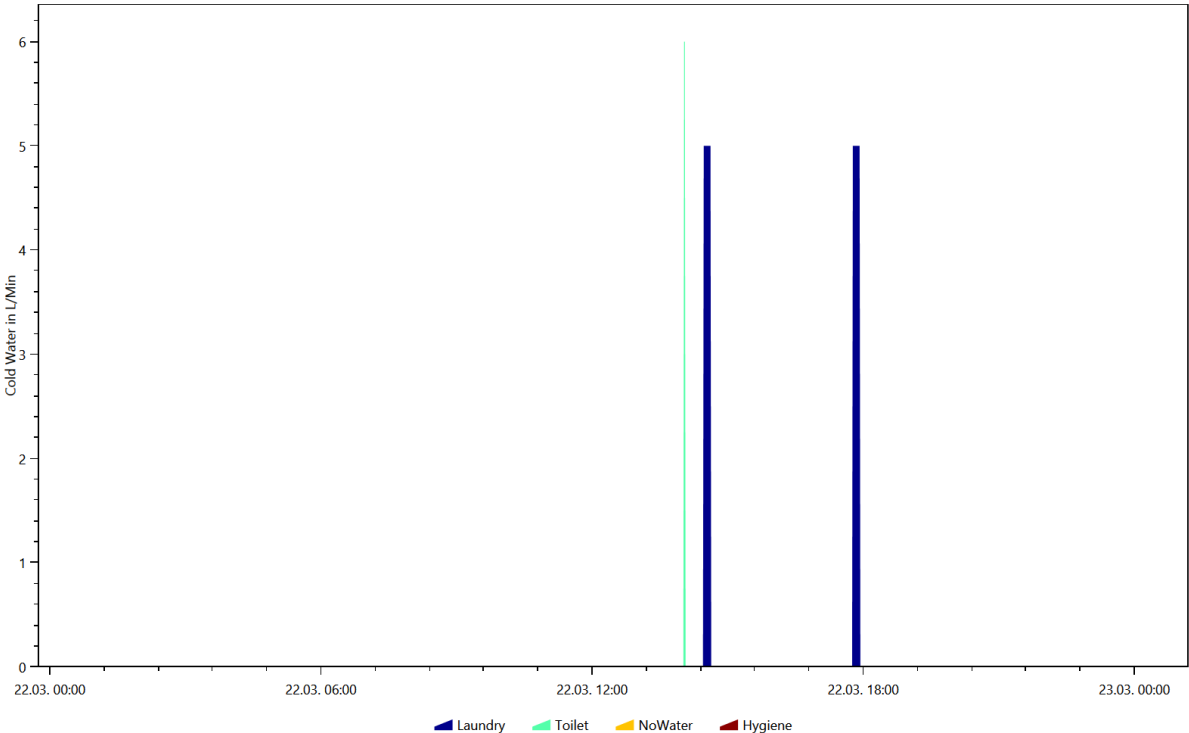
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.9



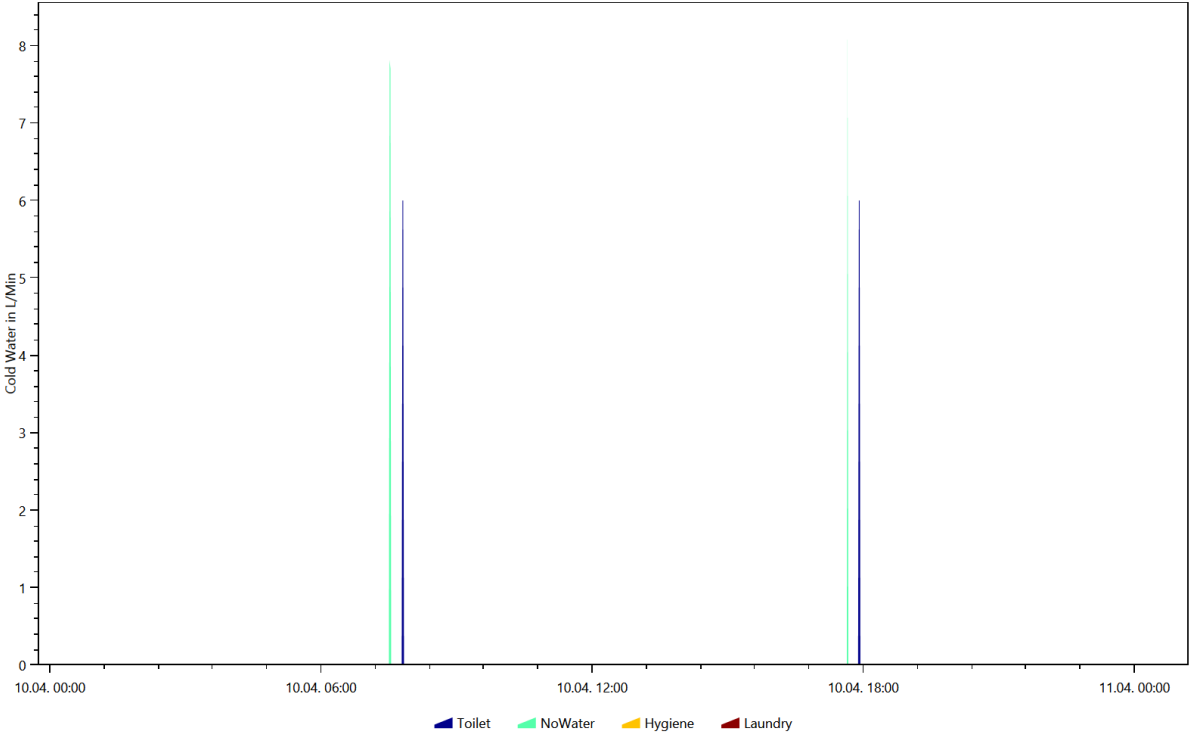
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.29



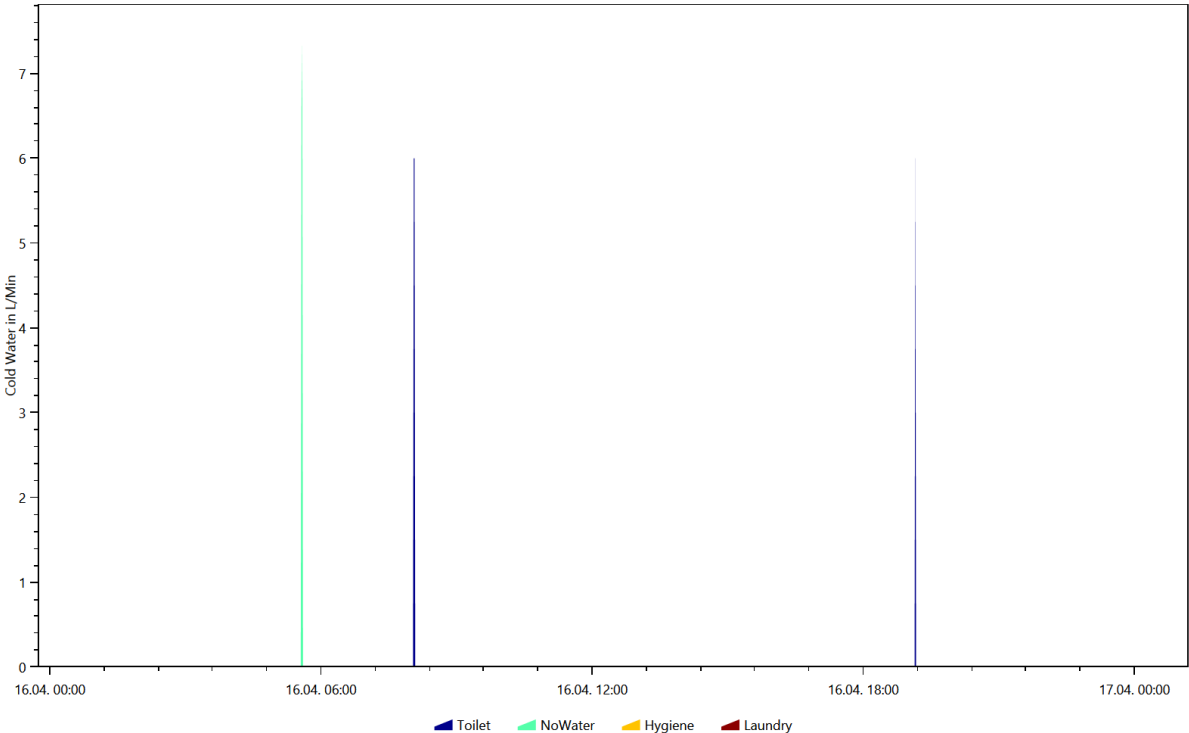
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.22



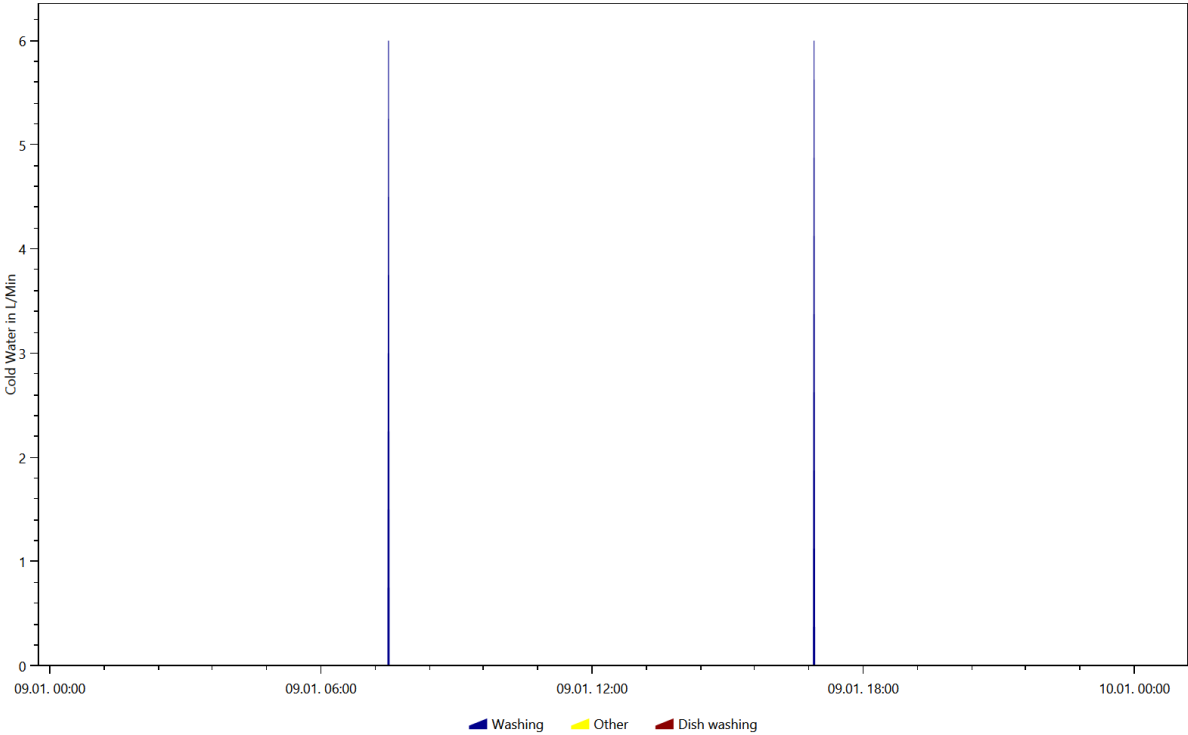
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.10



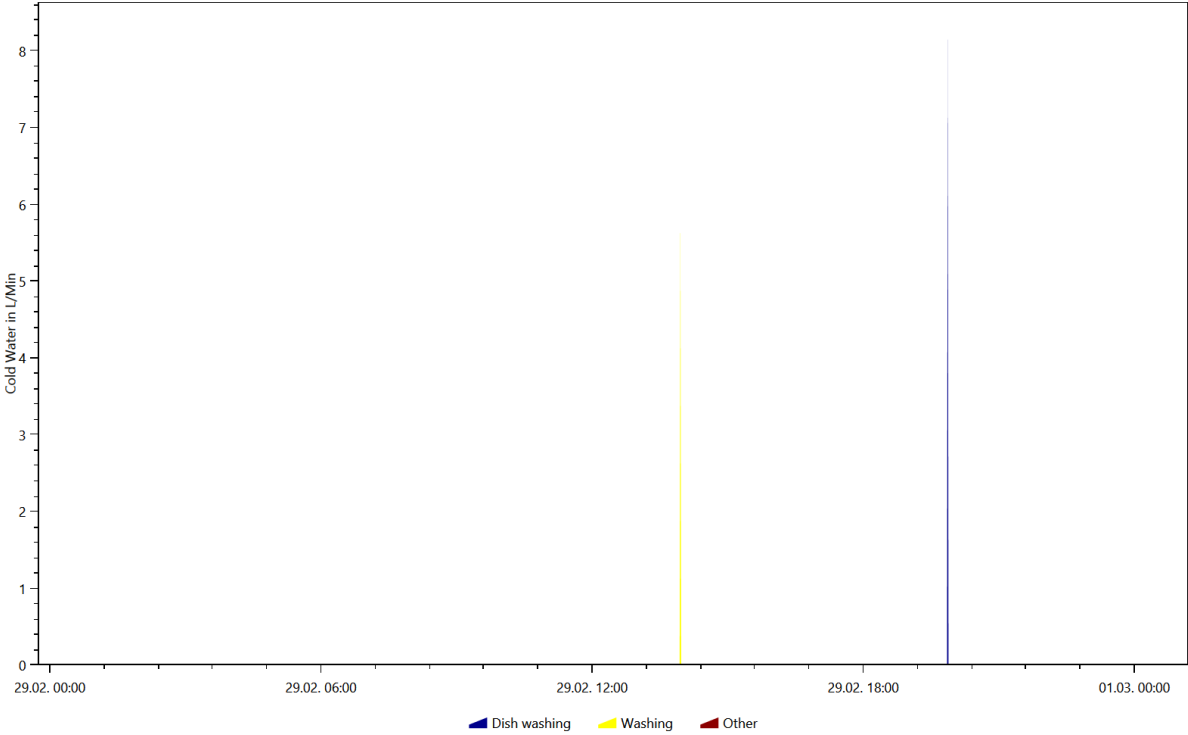
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.16



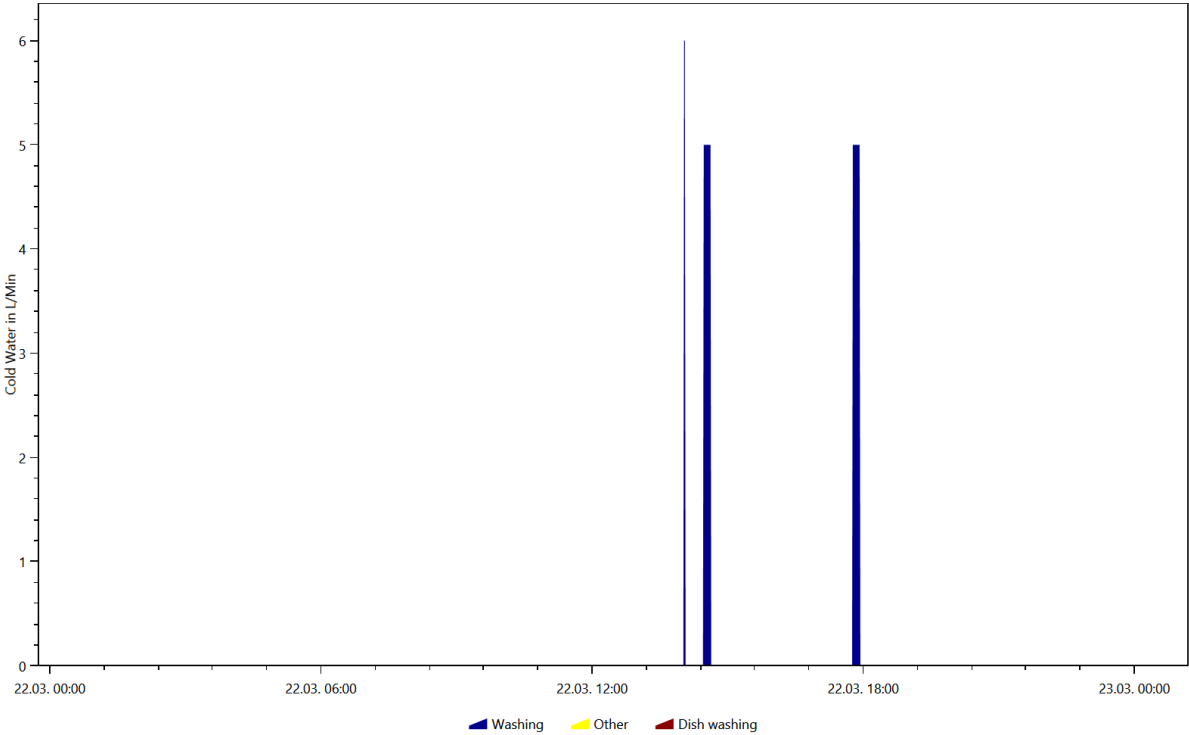
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.9



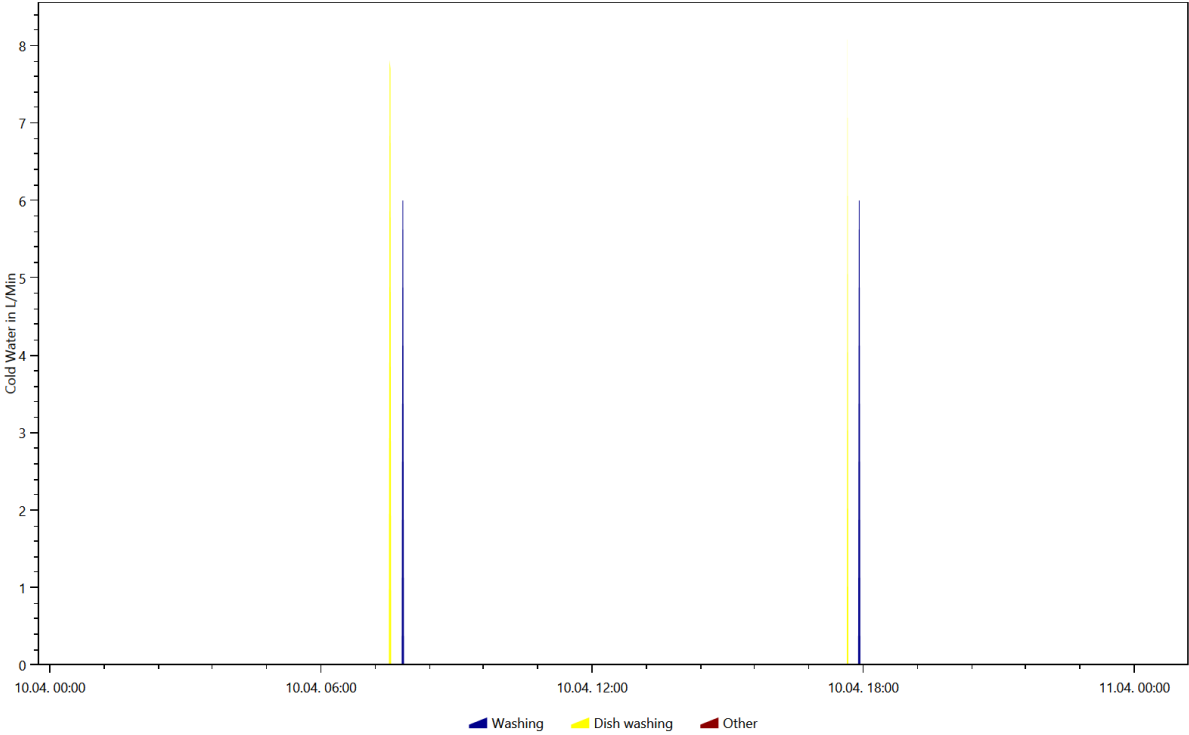
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.29



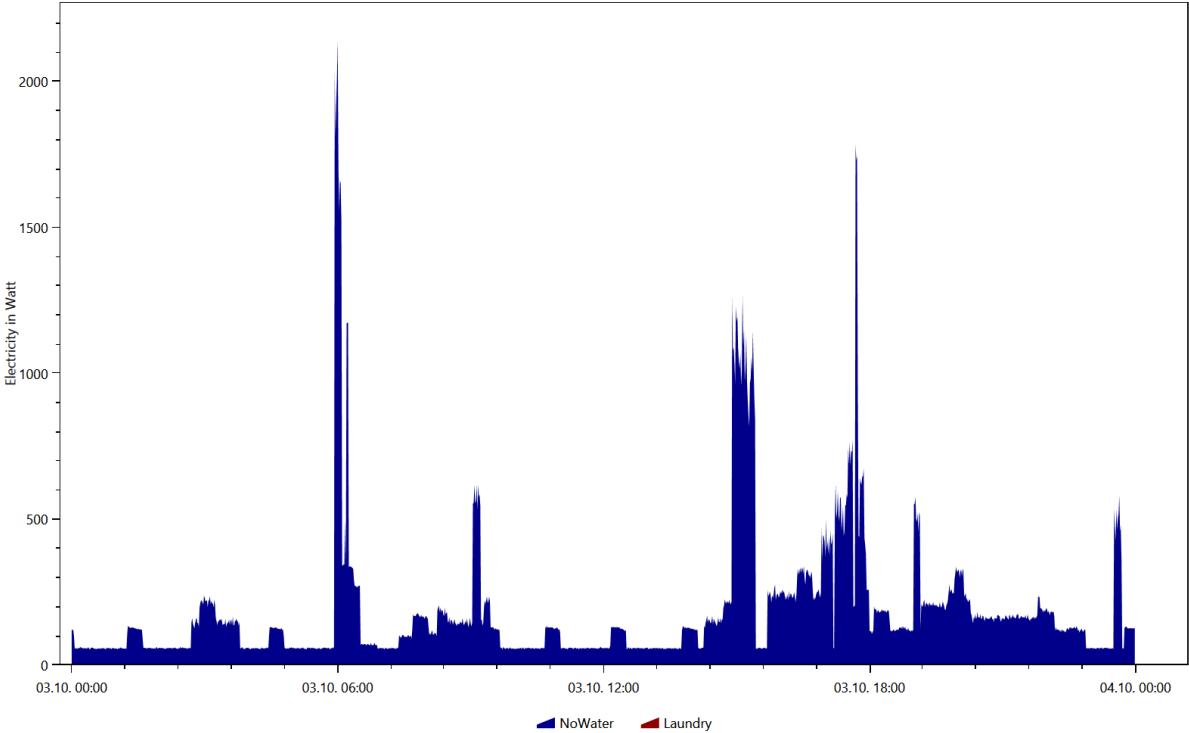
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.22



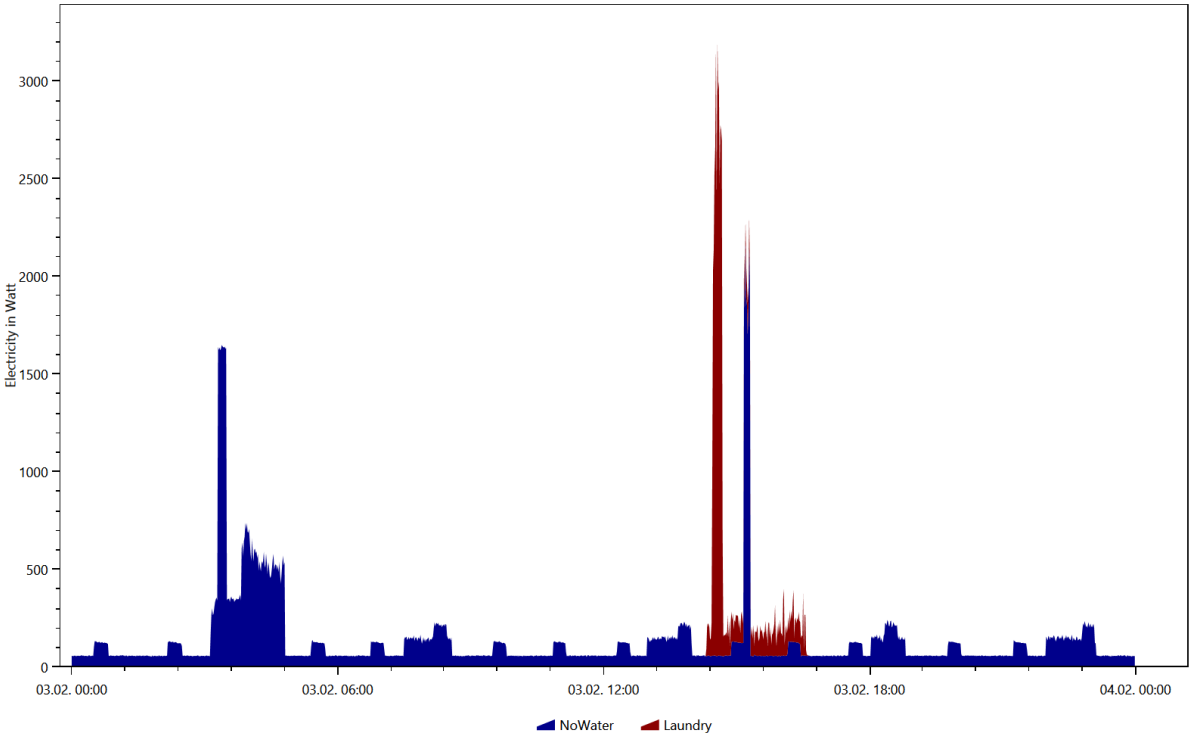
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.10



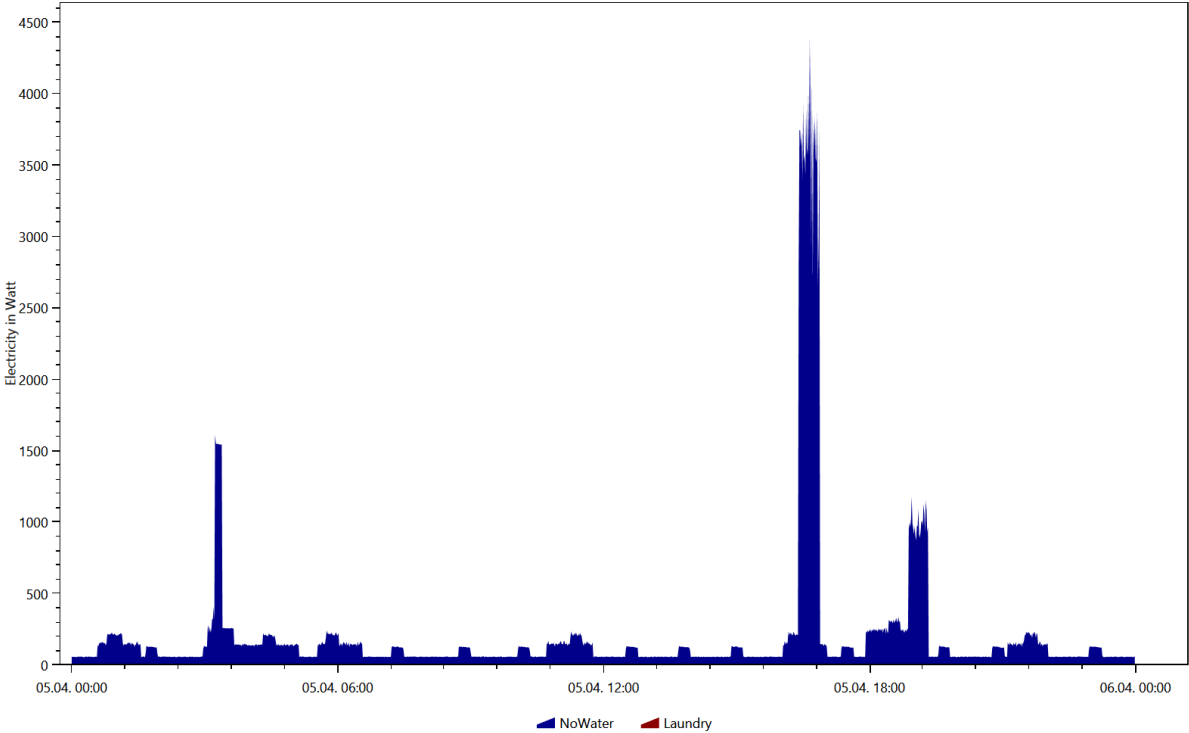
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.3



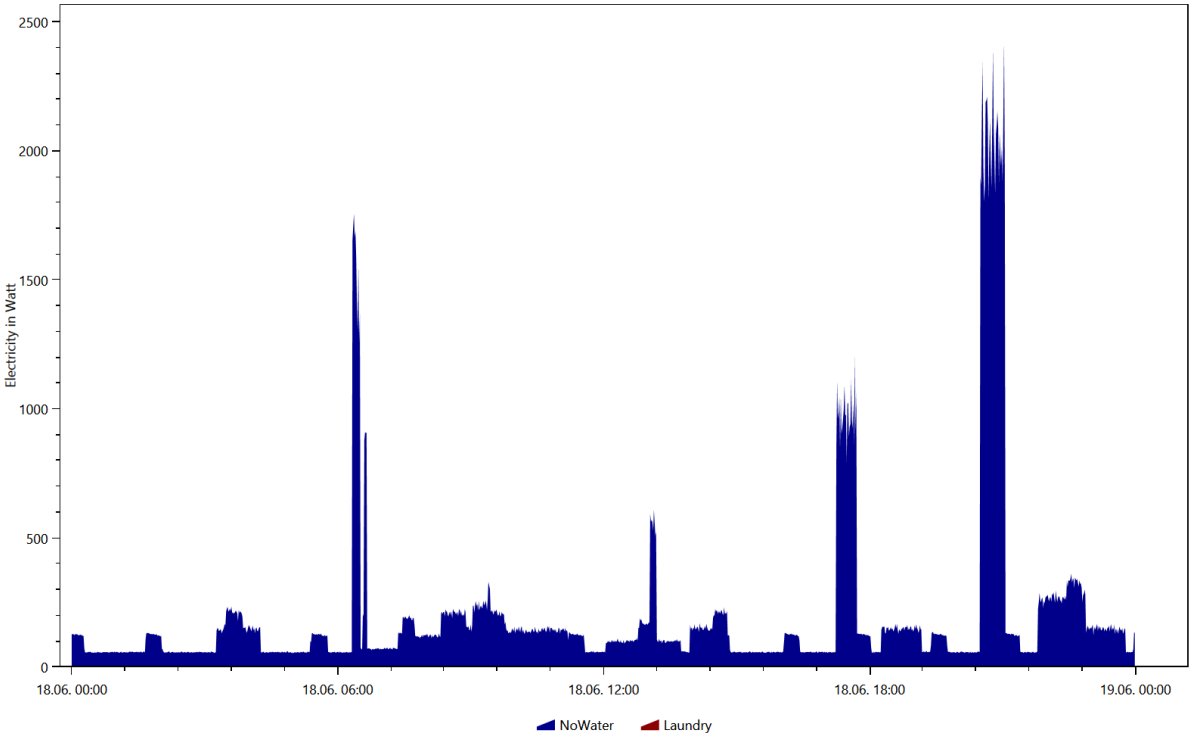
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.3



Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.5

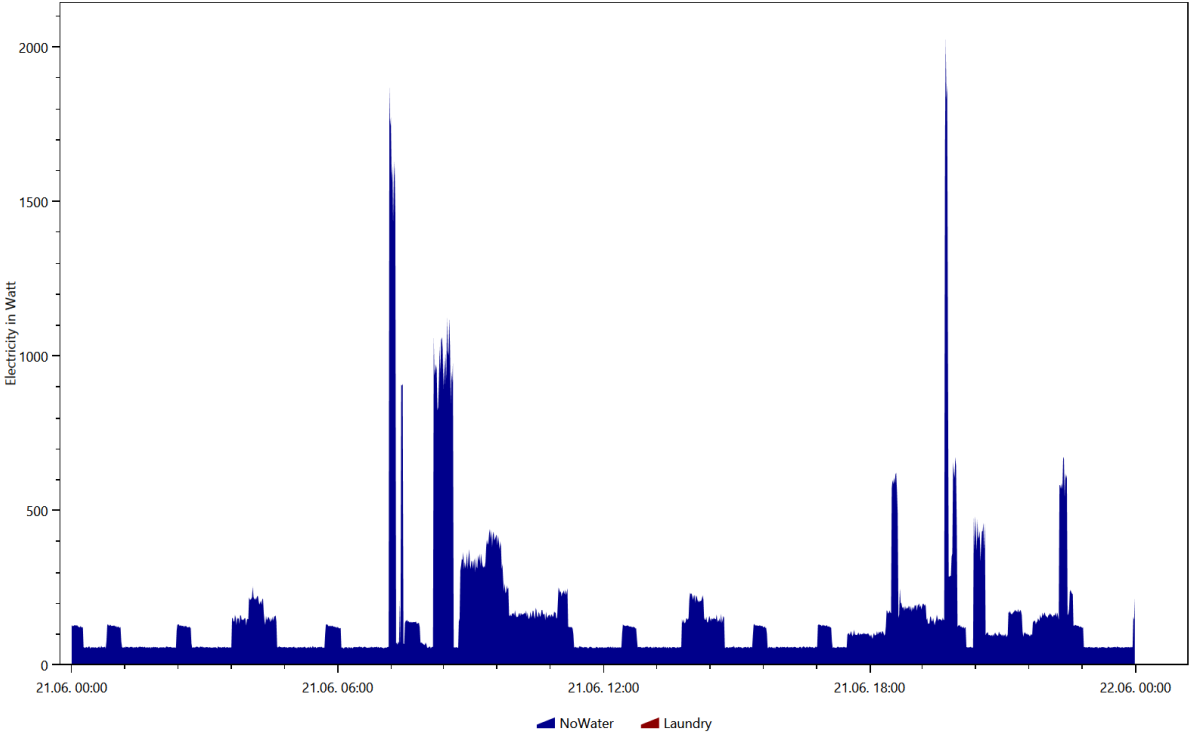


Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.18

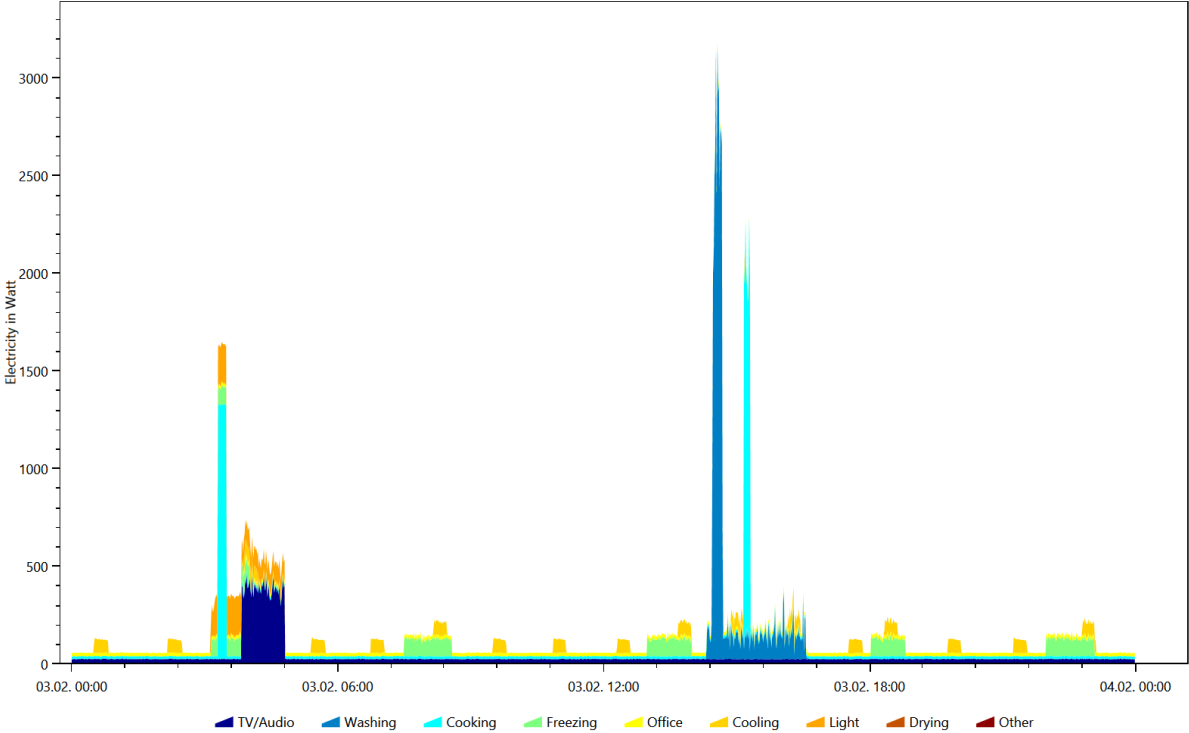




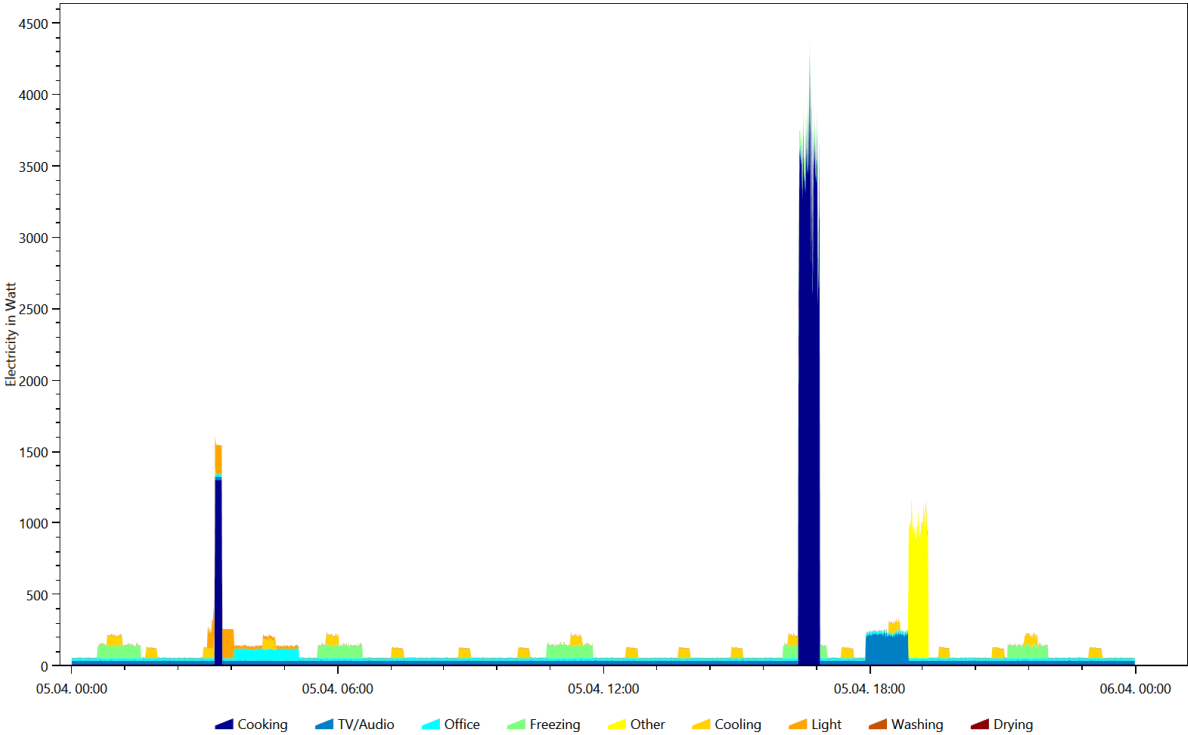
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.21



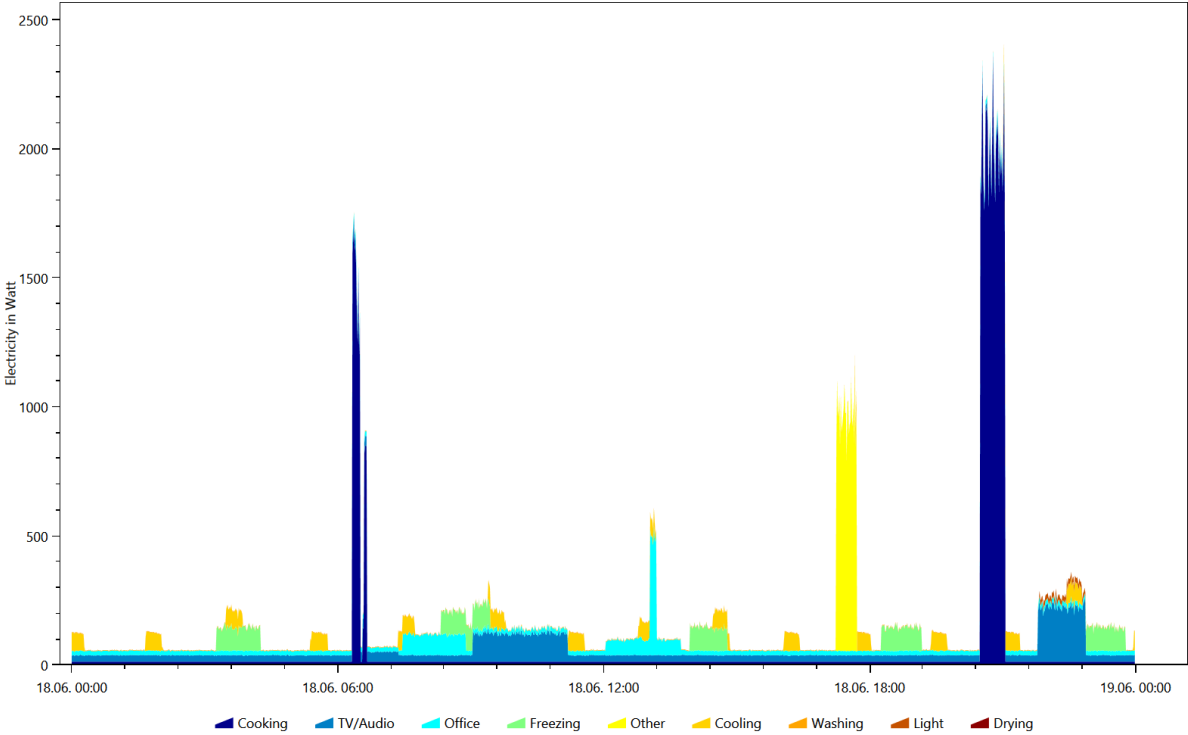
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.3



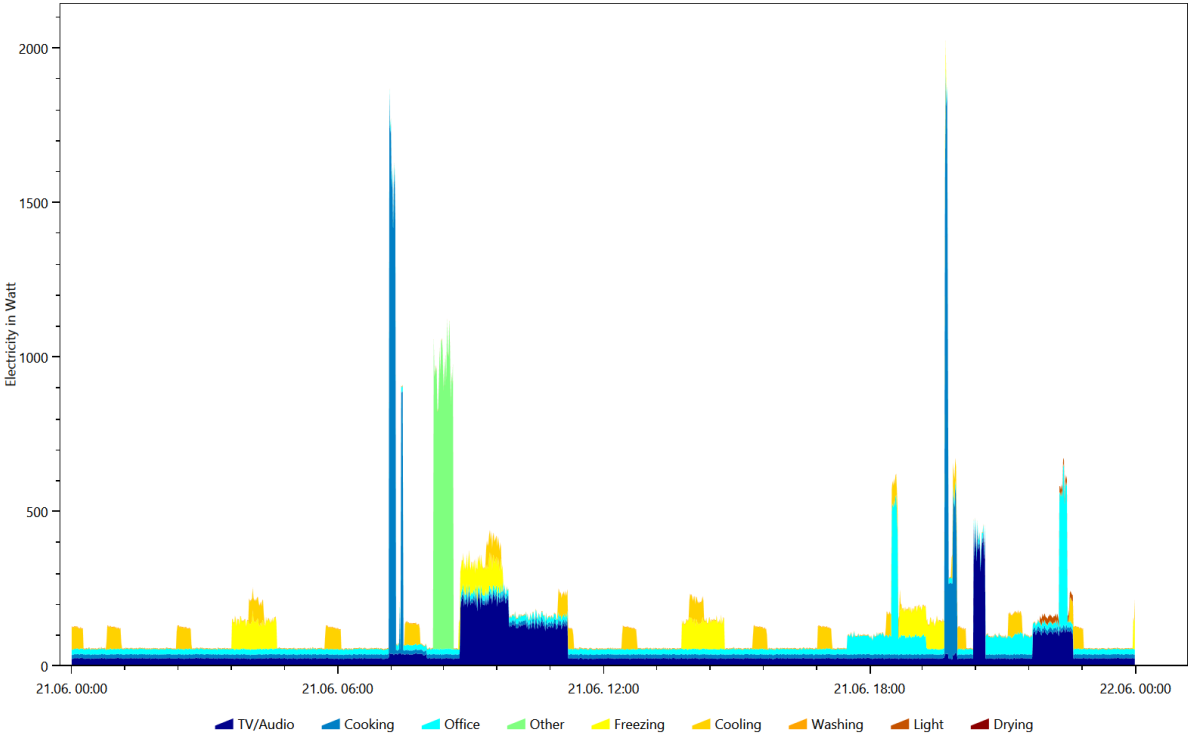
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.5



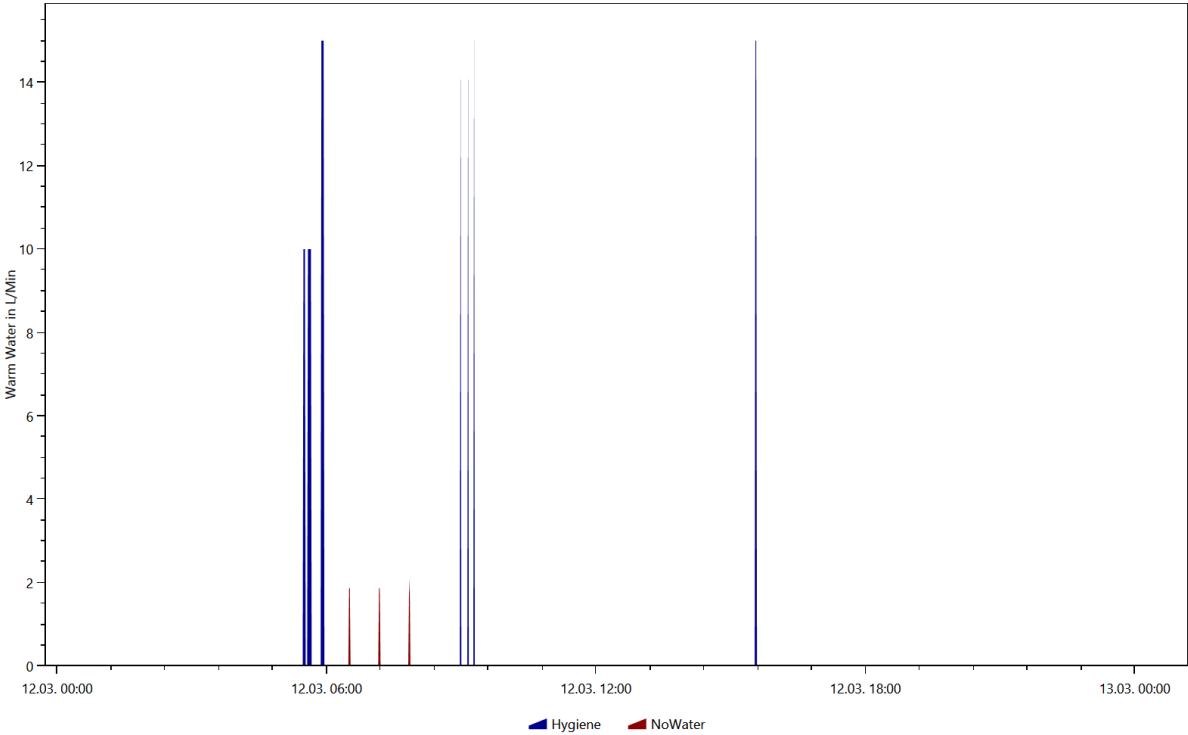
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.18



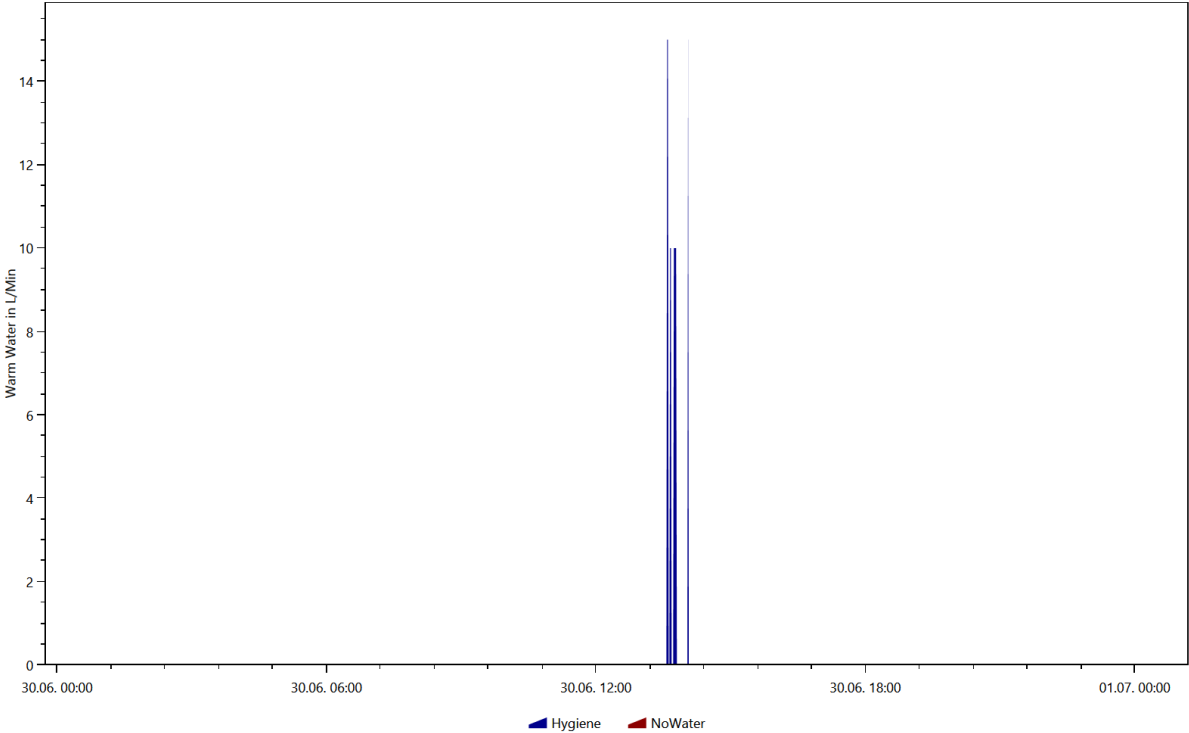
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.21



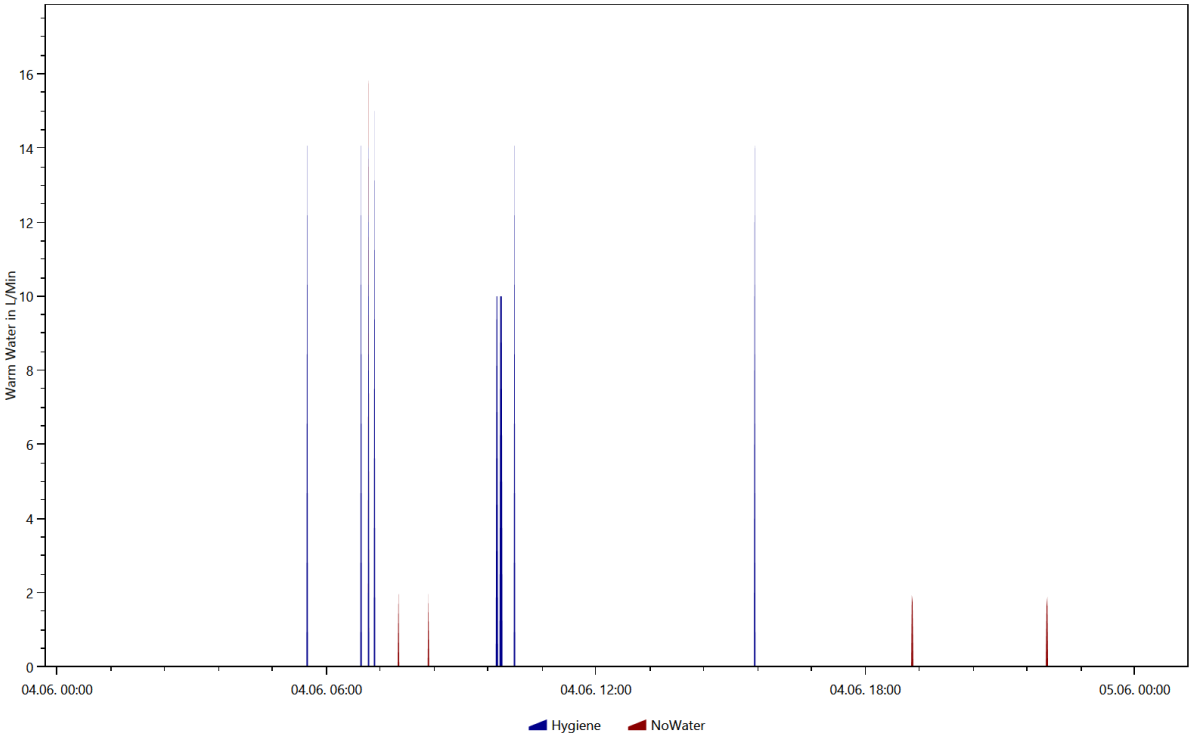
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.12



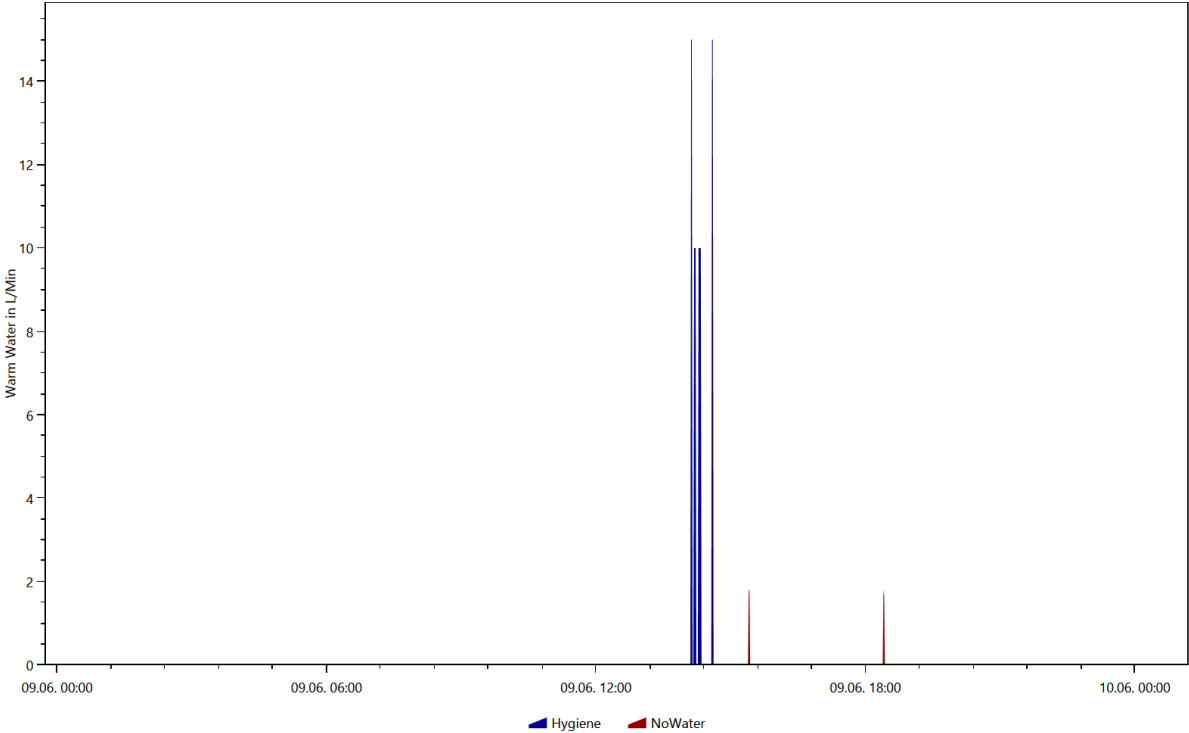
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.30



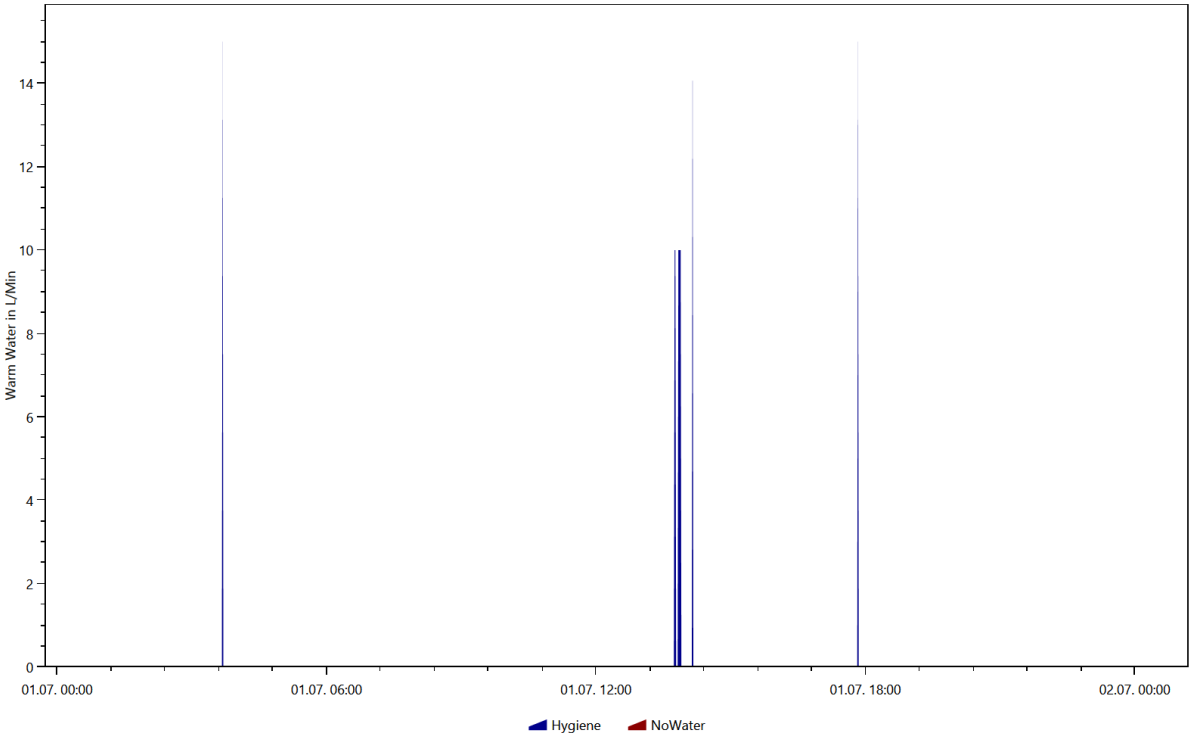
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.4



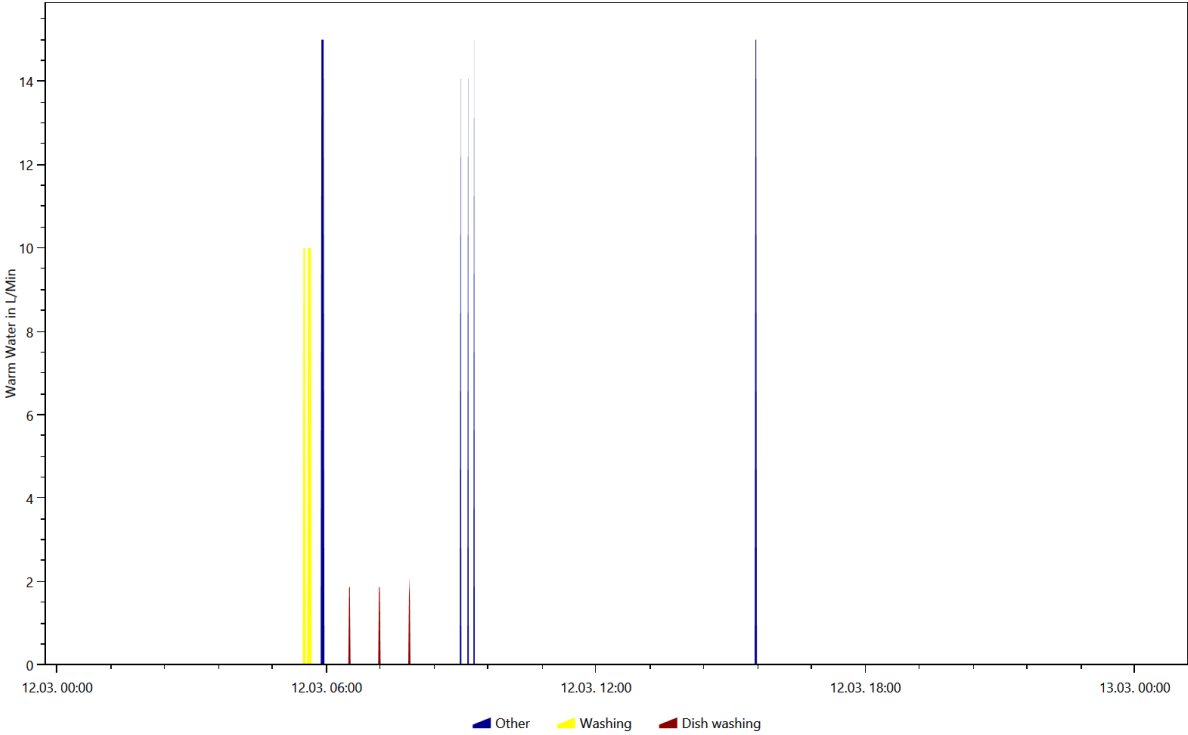
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.9



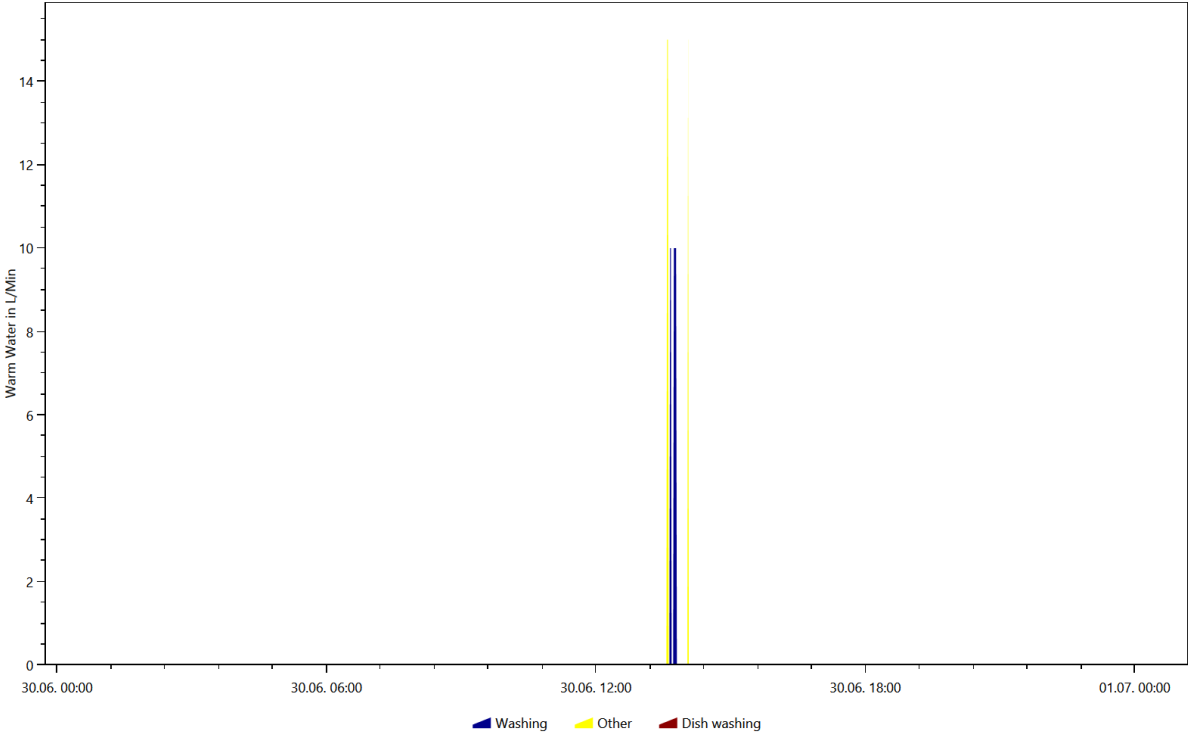
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.1



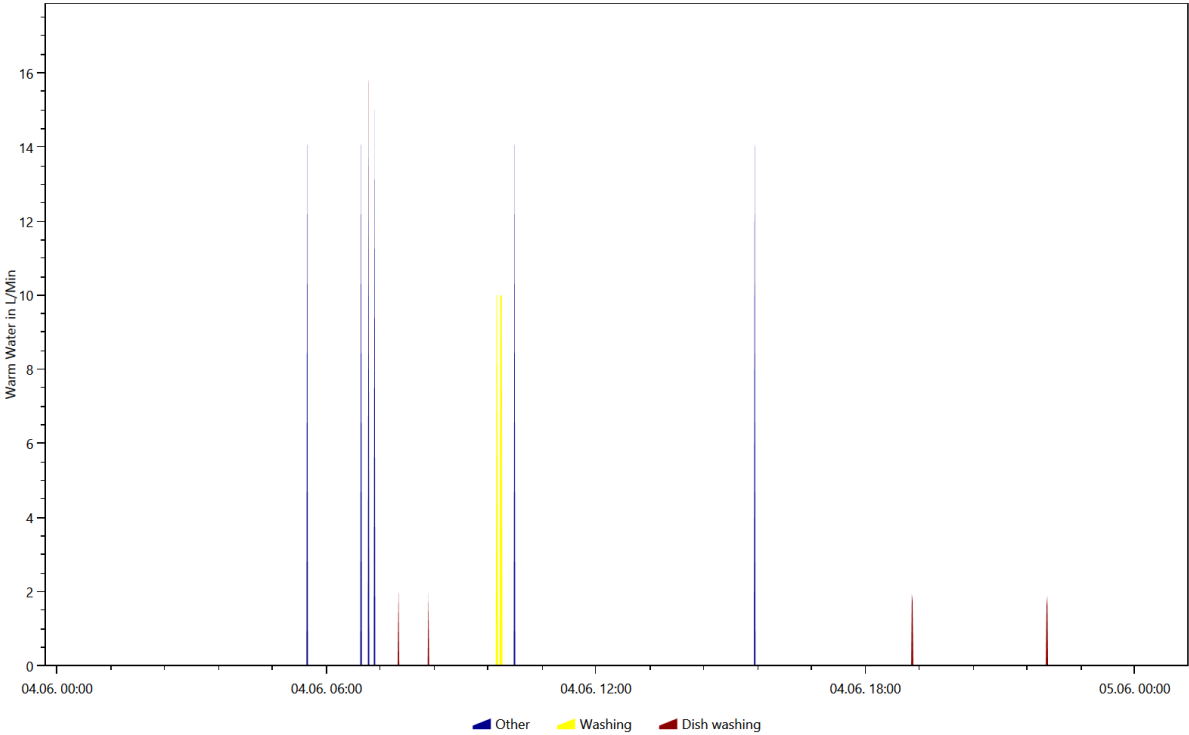
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.12



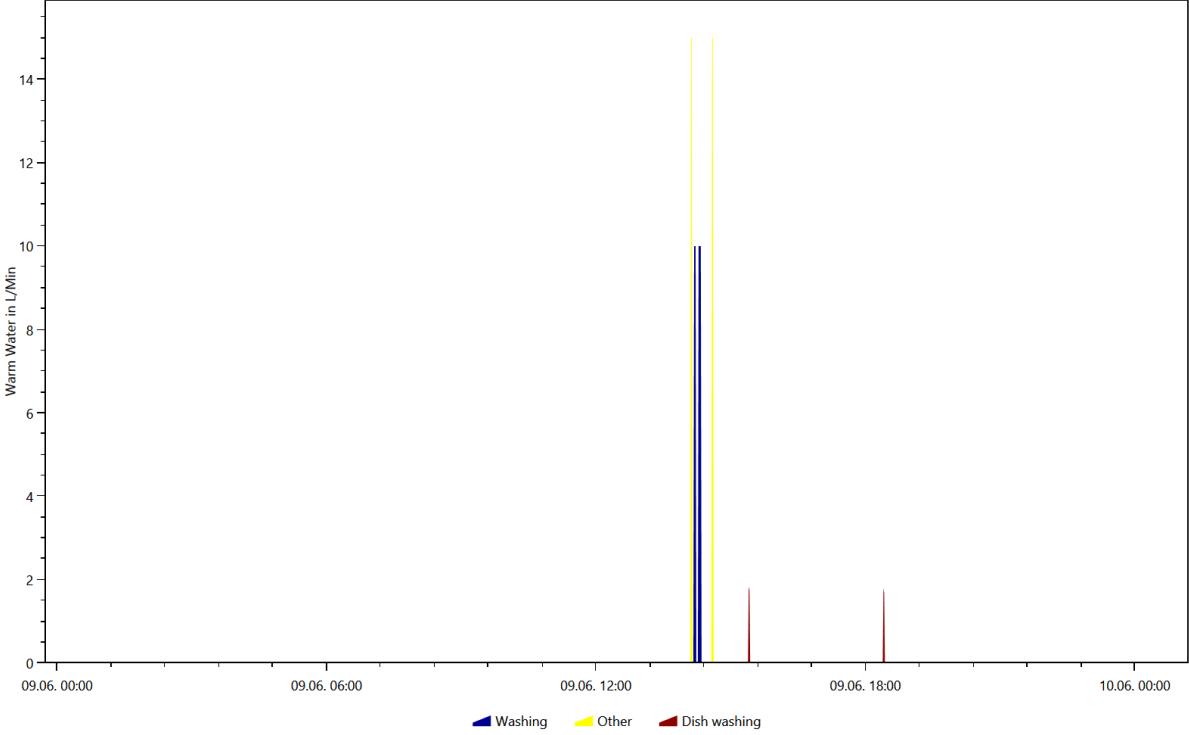
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.30



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.4



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.9

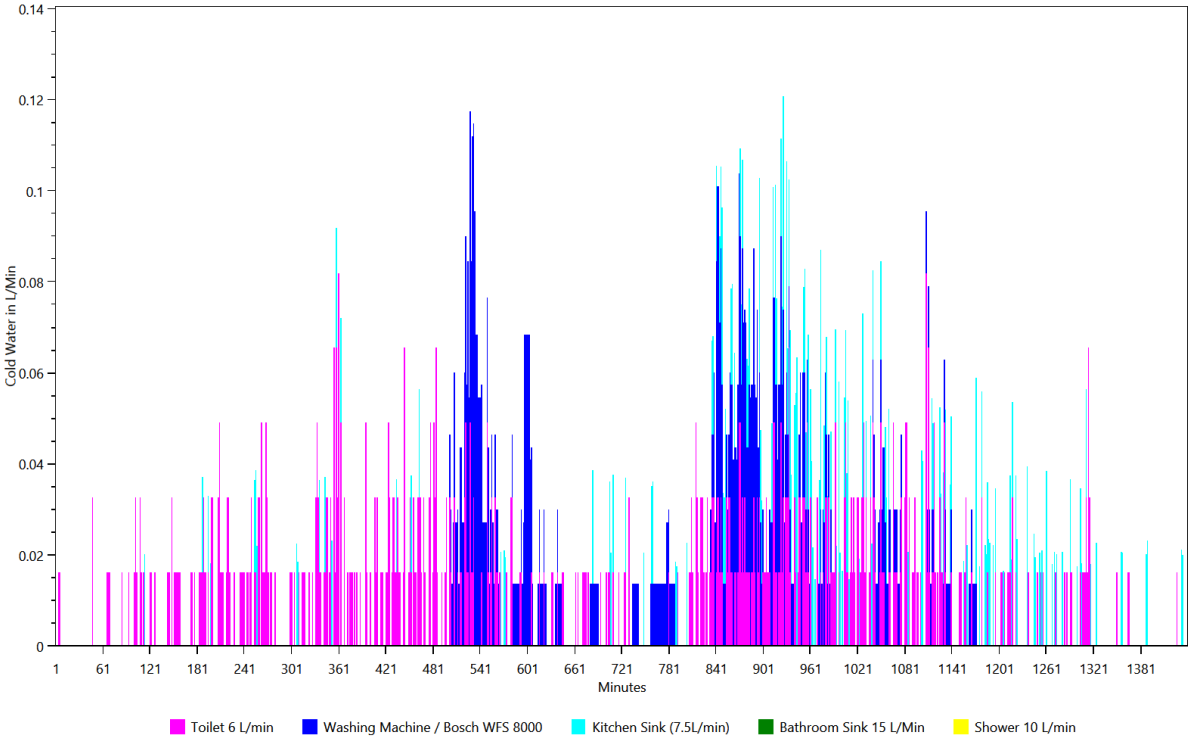


# Overview of the time and power of the use per load type per device

This is made from the files starting with: TimeOfUseEnergyProfiles

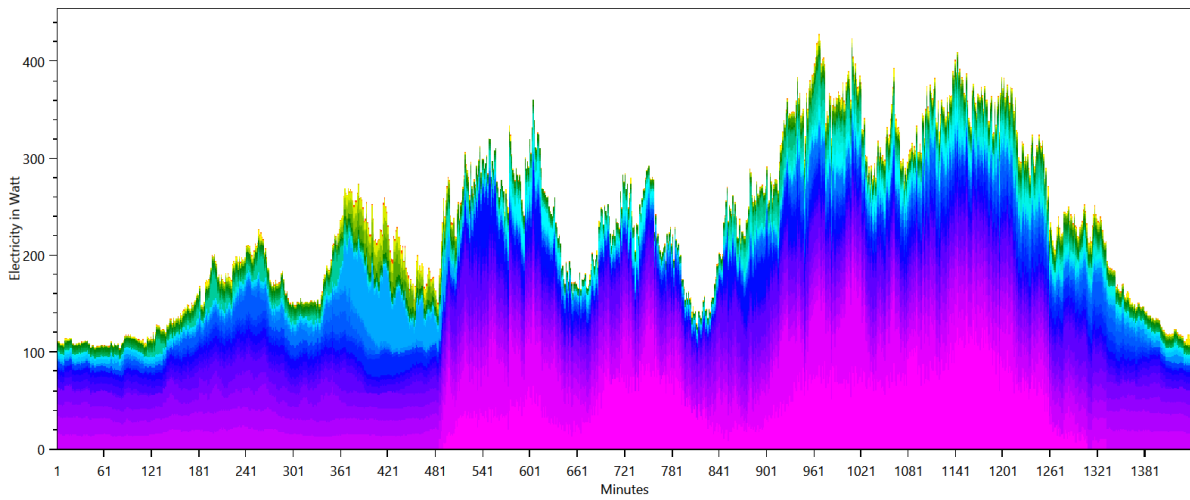
The time of use energy profiles show when each device was used and how much power it used.

## Cold Water



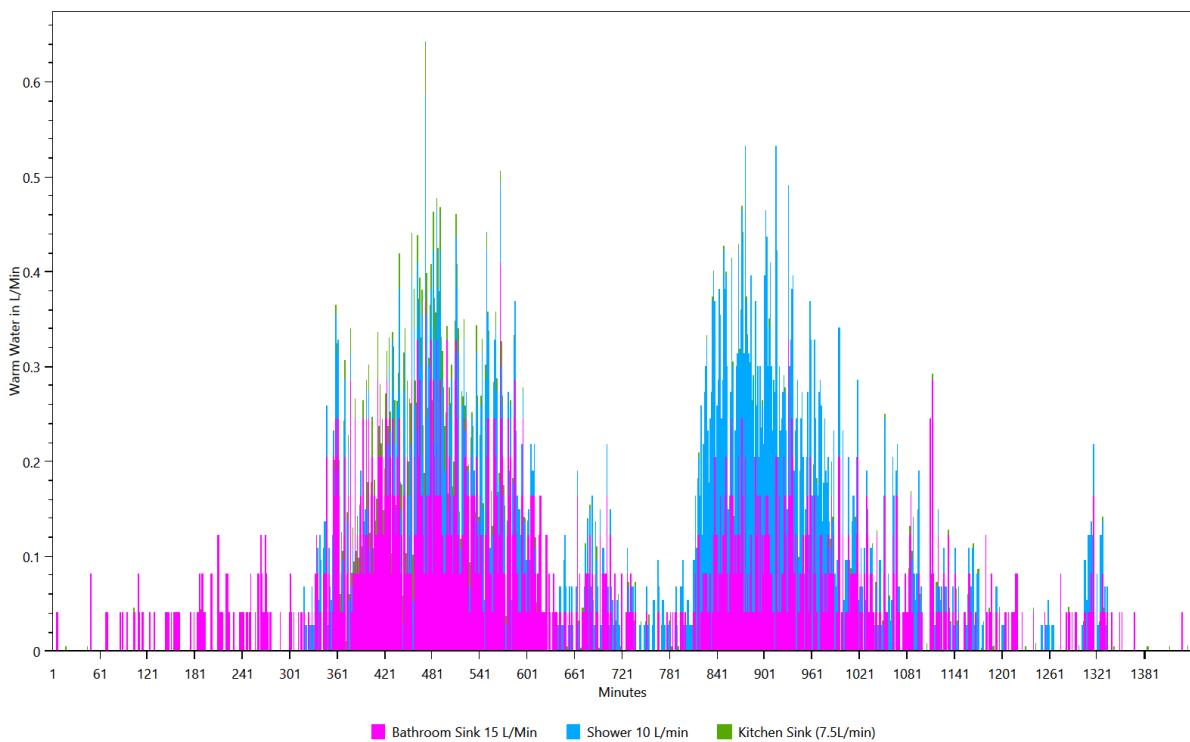


## Electricity



- Miele T 7744 C
- Oven / AEG B 33512-5-M
- Panasonic TX-P58V10E
- Liebherr Premium GNP 3666-20
- Microwave Panasonic (1991)
- Privileg Energy Saver X-200/80 (A++)
- Christopeit Treadmill TM 2 Pro
- Router / AVM FRITZ! Box Fon WLAN 7390
- PC / Acer Aspire M3640
- TV / Philips 32PEL7605H
- Washing Machine / Bosch WFS 8000
- Kitchen Light (200W)
- Microsoft Xbox 360
- Deep Fryer / DeLonghi F 28311.W Rotofritteuse
- Steam Cooker / Philips HD9140
- TASKalfa 180
- Coffee Machine / Braun KF 580E
- Hifi System / Sharp XL-HF300PH
- SAT Receiver / Kathrein UFS913
- Vacuum Cleaner Fif
- Fondue / Unold 48746 Asia
- Single Stove Plate
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove front right-semi aktiv
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove left hind - full power
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen-stove right hind
- PC Monitor / Fujitsu Siemens Scaleview D19-1
- Electric Tooth Brush / Phillips HX9332
- CD/DVD Player / Philips DVDR 725 H
- Living Room Light (Energy Saving Lamp, 20W)
- Kitchen radio / AEG KRC 4323 CD
- Extractor Hood / Miele DA 429-4
- Ricecooker / Tristar RK-6112
- Toaster Salco MT 400
- Children Room Light (100W)
- Moulinex electronic 833
- Miele DA 61
- Bathroom Light (100W)
- Egg Cooker / Russell Hobbs 14048-56 Stylo
- Bedroom Light (200W)
- Electric Kettle / Petra WK288 1.5L
- Epson Stylus Color 860
- Fancy Ceiling Lights with at least 3 Bulbs
- Bathroom Mirror Light 30W (CFL)
- Electric Razor / Phillips PT860/16 Razor PowerTouch Plus
- External Harddrive omega 3.5"
- Food Slicer / DOMO Schneidemaschine DO521S
- Canon CanoScan LIDE 110
- Immersion Blender Noah Hit Top

## Warm Water



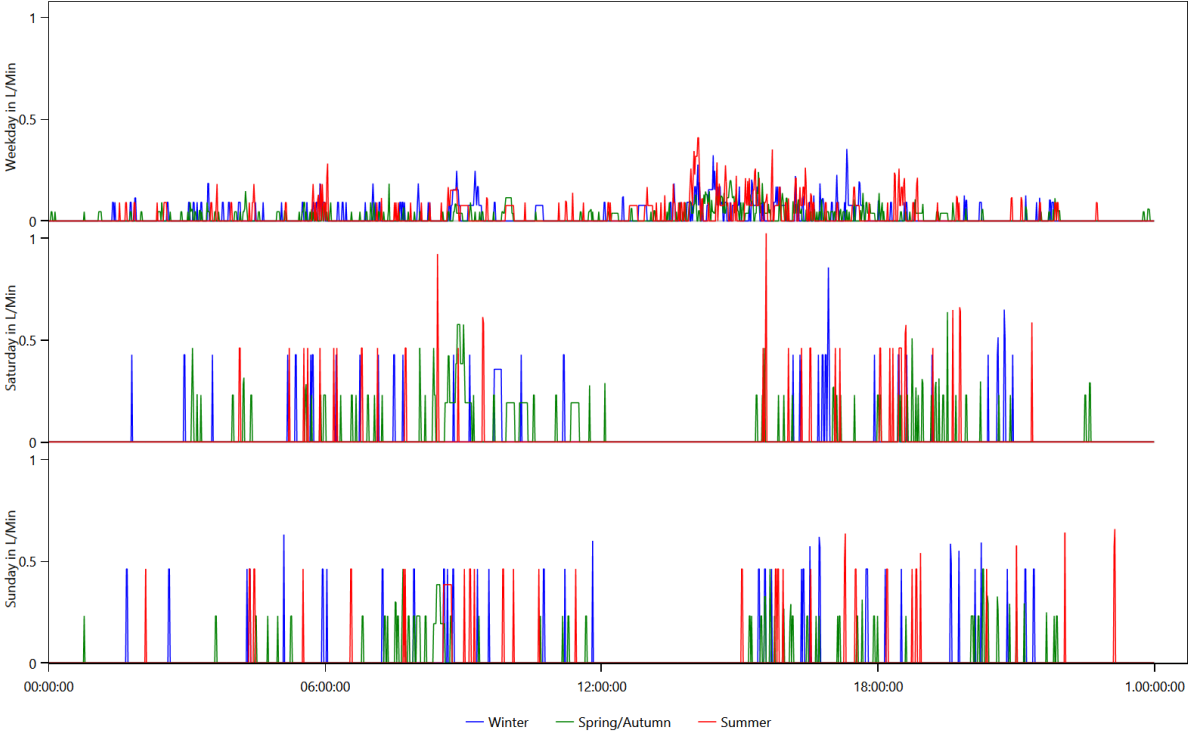
- Bathroom Sink 15 L/Min
- Shower 10 L/min
- Kitchen Sink (7.5L/min)

# Energy use per load type during different seasons, split by weekday/saturday/sunday

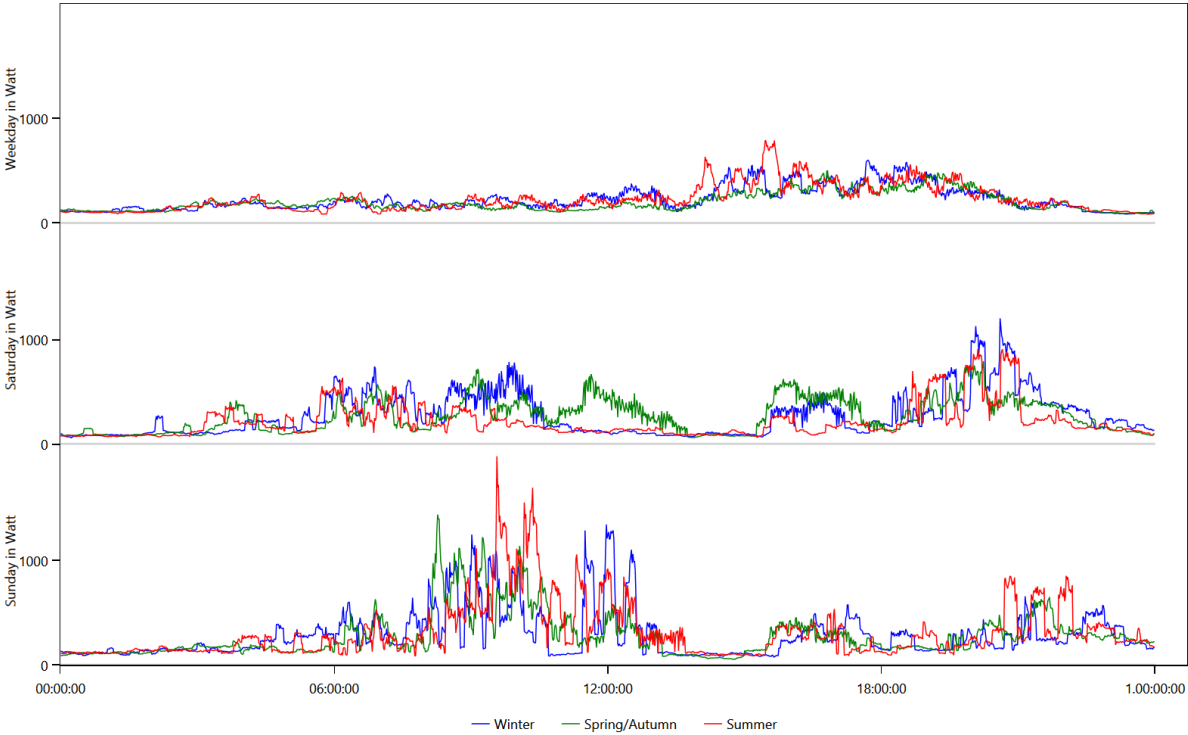
This is made from the files starting with: WeekdayProfiles

This graph shows for each load type the average power consumption per day grouped byseason and weekday/saturday/sunday.

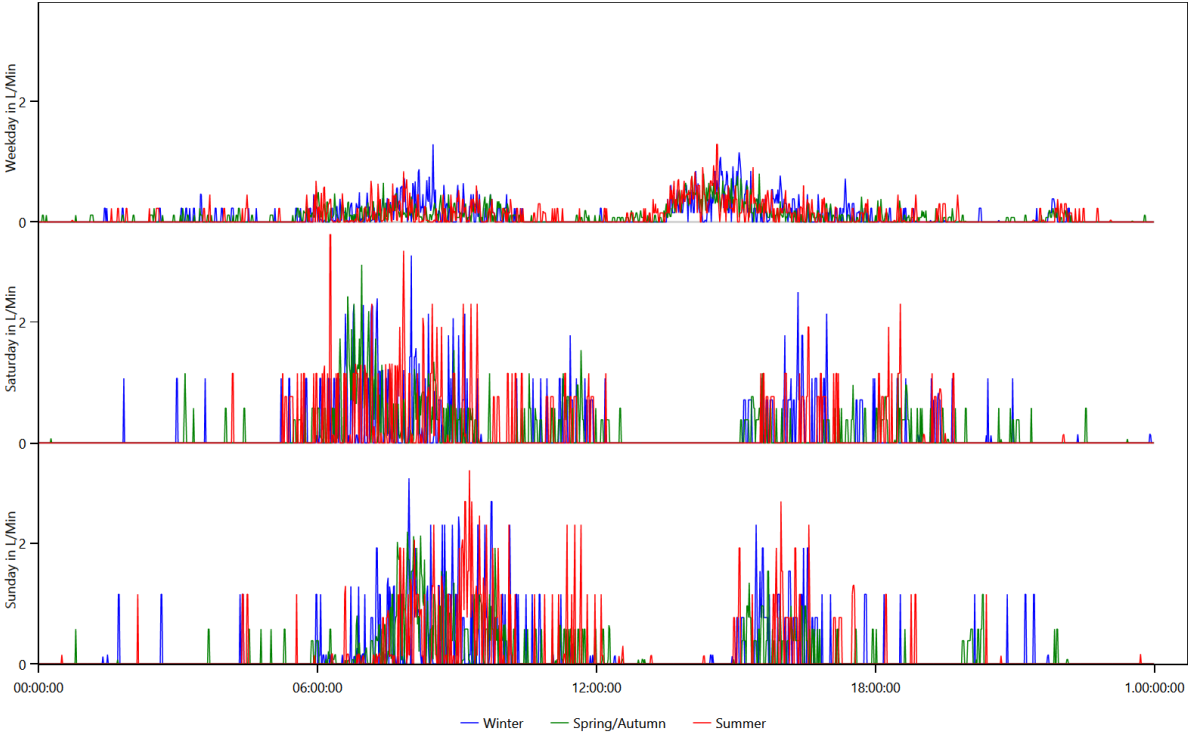
## Cold Water



# Electricity



# Warm Water

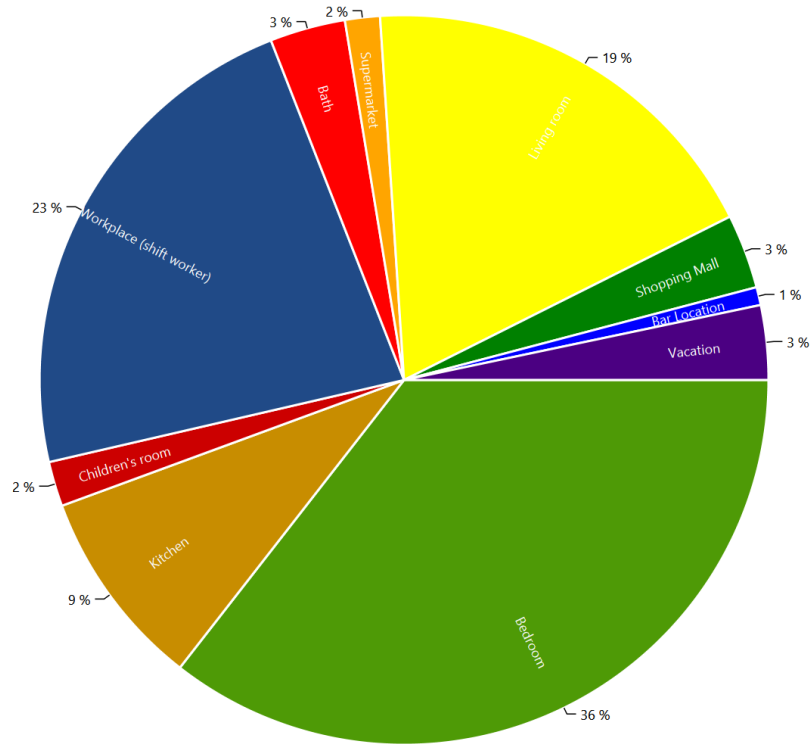


# Location Distribution per Person

This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

CHR10 Alvin 2 (40 Male)



# Actions.csv

## This is made from the files starting with: Actions

These files show the actions of each person in the household. The content looks like this:

Actions.HH0.csv

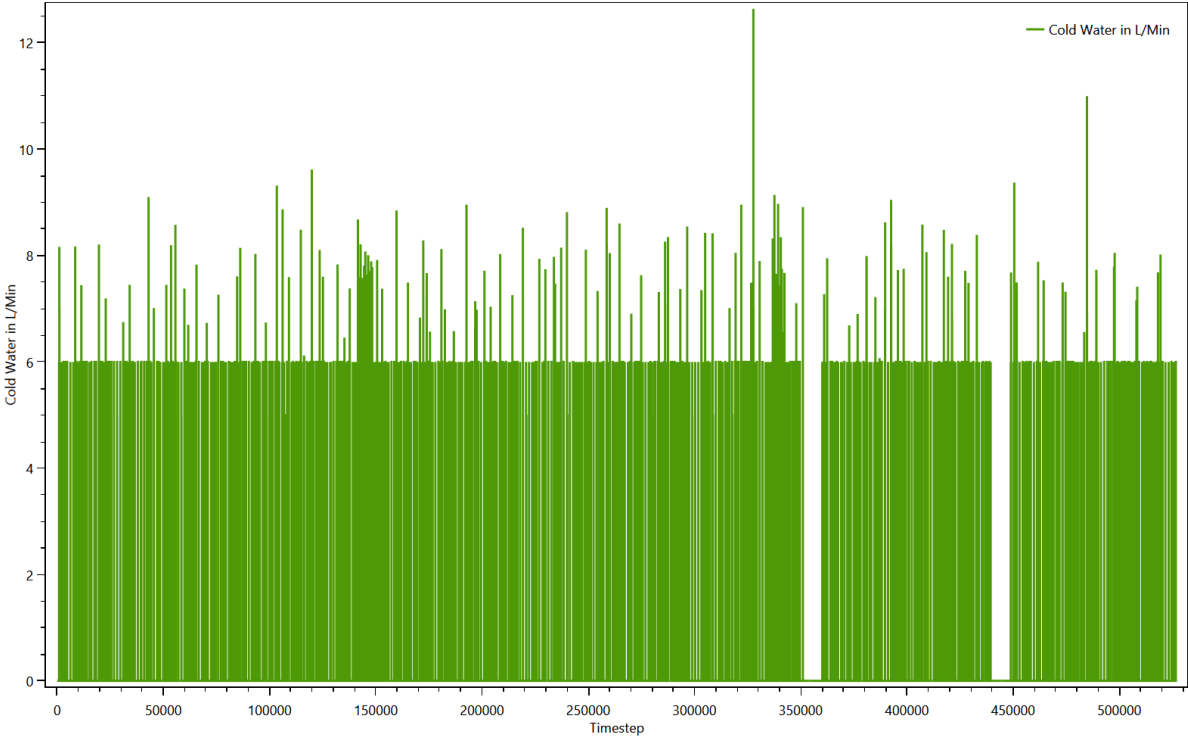
Time step;Calendertime;Person;Selected affordance;Affordance Category;Is Sick  
0;01.01.2016 00:00;CHR10 Alvin 2 (40/Male);sleep bed 07 (08 h) (shift worker man);sleep;False;  
234;01.01.2016 03:54;CHR10 Alvin 2 (40/Male);microwave frozen meal and eat it;cooking;False;  
263;01.01.2016 04:23;CHR10 Alvin 2 (40/Male);watch TV (1 h);Passive Entertainment (TV etc.);False;  
324;01.01.2016 05:24;CHR10 Alvin 2 (40/Male);work as shift worker (man);work;False;  
867;01.01.2016 14:27;CHR10 Alvin 2 (40/Male);go to the toilet;hygiene;False;  
872;01.01.2016 14:32;CHR10 Alvin 2 (40/Male);take a shower (men);hygiene;False;  
892;01.01.2016 14:52;CHR10 Alvin 2 (40/Male);go shopping for food in the supermarket (1.5  
h);shopping;False;  
996;01.01.2016 16:36;CHR10 Alvin 2 (40/Male);make custom pizza and eat it;cooking;False;  
1051;01.01.2016 17:31;CHR10 Alvin 2 (40/Male);rest for 10 min;sleep;False;  
1062;01.01.2016 17:42;CHR10 Alvin 2 (40/Male);clean the bath;cleaning;False;  
1124;01.01.2016 18:44;CHR10 Alvin 2 (40/Male);exercise for 30 min on the treadmill;sports;False;  
1153;01.01.2016 19:13;CHR10 Alvin 2 (40/Male);sleep bed 07 (08 h) (shift worker man);sleep;False;  
1653;02.01.2016 03:33;CHR10 Alvin 2 (40/Male);go to the toilet;hygiene;False;  
1658;02.01.2016 03:38;CHR10 Alvin 2 (40/Male);use the computer for recreation (2 h);Active Entertainment  
(Computer, Internet etc);False;  
1800;02.01.2016 06:00;CHR10 Alvin 2 (40/Male);eat breakfast (1 h);cooking;False;  
1865;02.01.2016 07:05;CHR10 Alvin 2 (40/Male);get ready in the morning (men);hygiene;False;  
1876;02.01.2016 07:16;CHR10 Alvin 2 (40/Male);play Xbox (1 h);Passive Entertainment (TV etc.);False;  
1925;02.01.2016 08:05;CHR10 Alvin 2 (40/Male);rest for 10 min;sleep;False;  
1936;02.01.2016 08:16;CHR10 Alvin 2 (40/Male);watch the news;Passive Entertainment (TV etc.);False;

# Sum Profiles

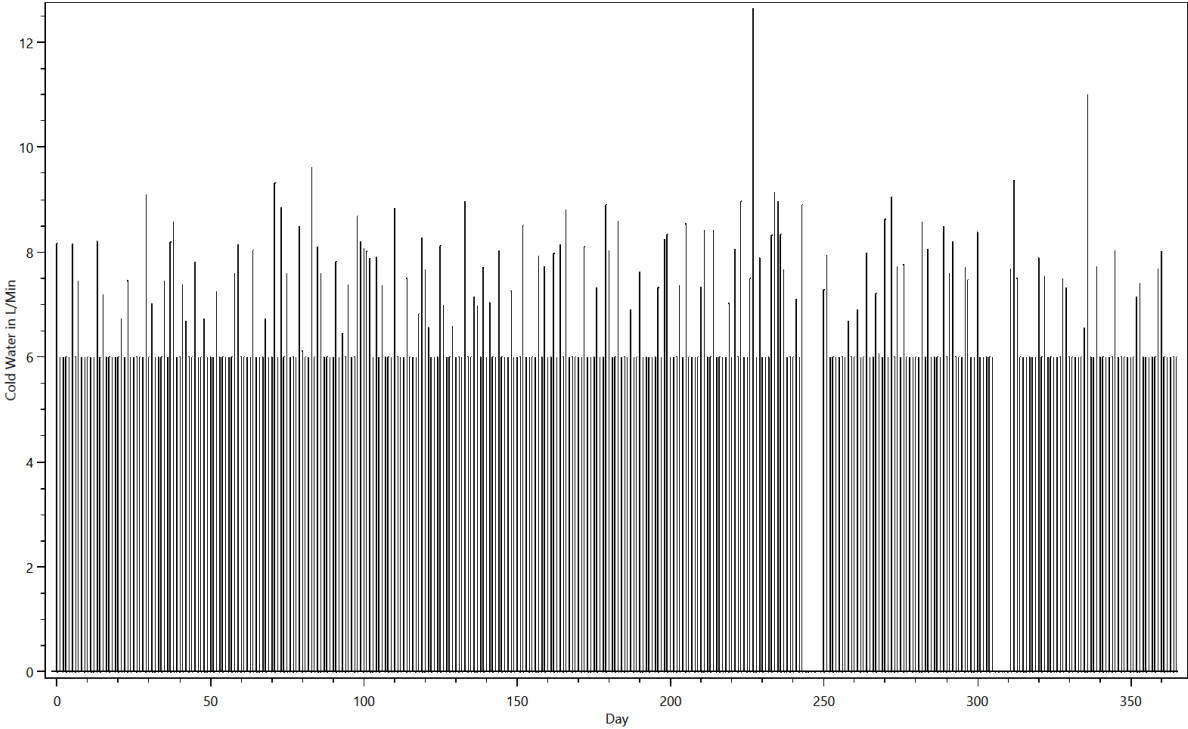
This is made from the files starting with: SumProfiles

This shows the energy use during the simulation.

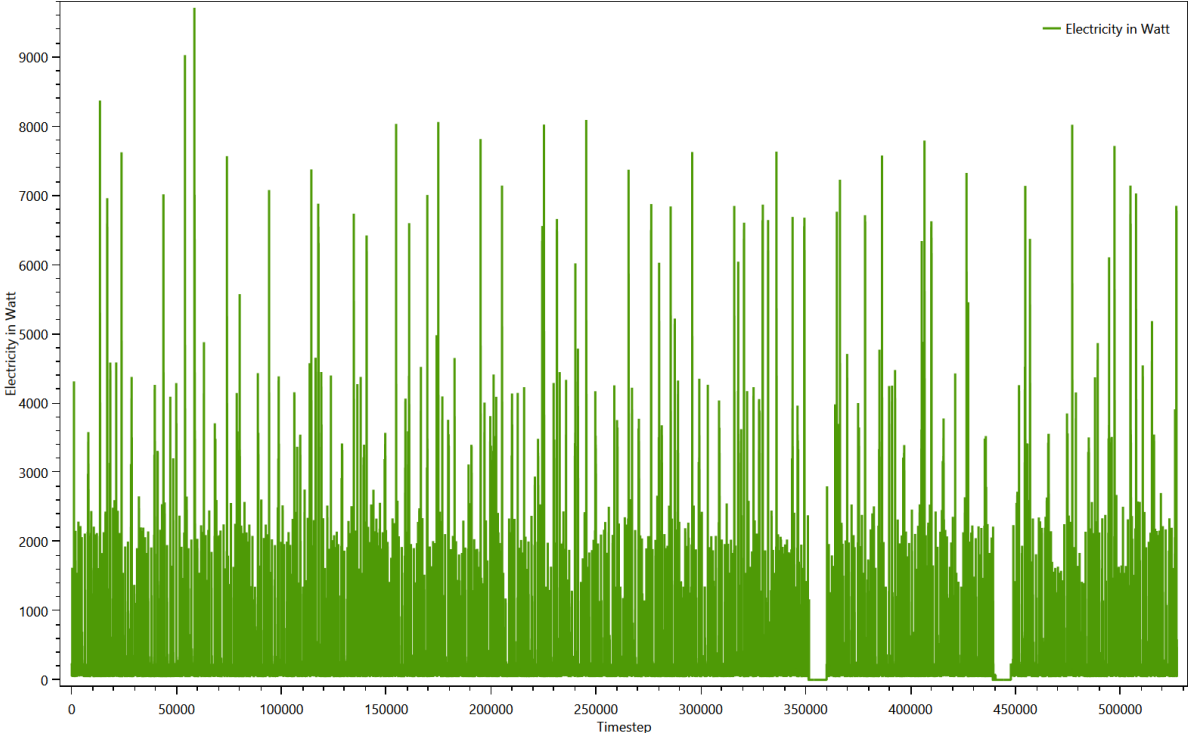
Summed up curve for Cold Water from SumProfiles.Cold Water.png



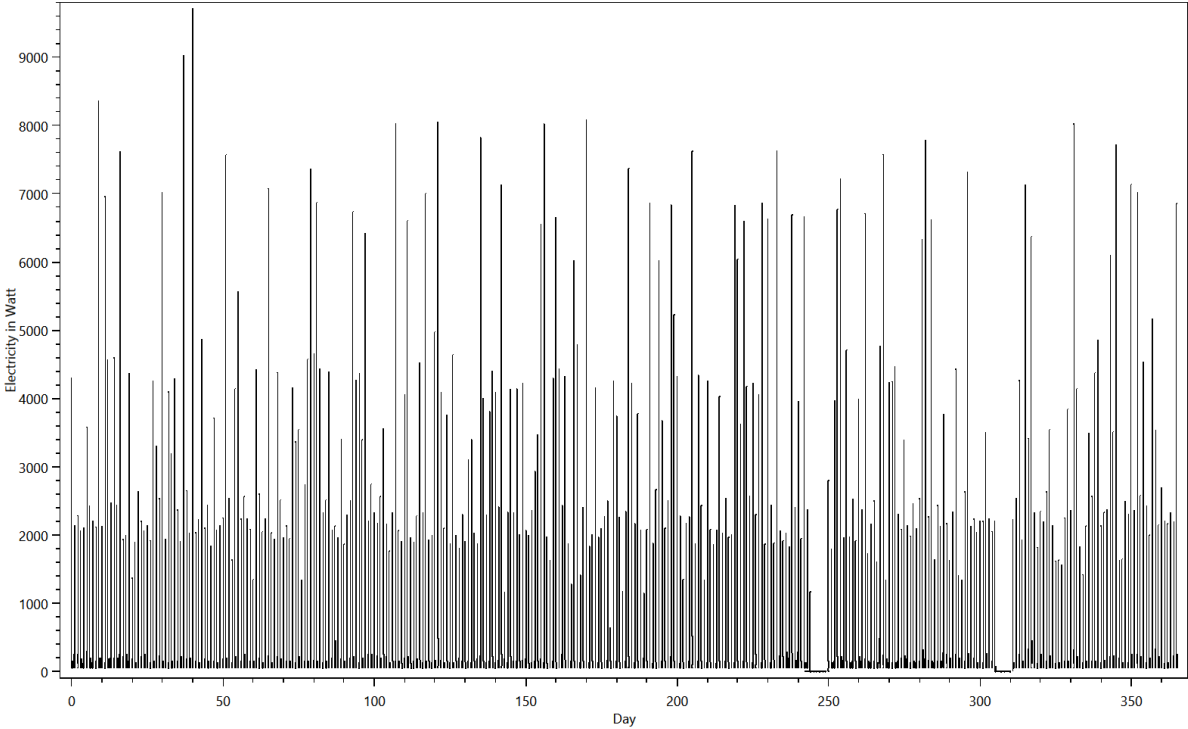
Summed up curve for Cold WaterMinMax from SumProfiles.Cold WaterMinMax.png



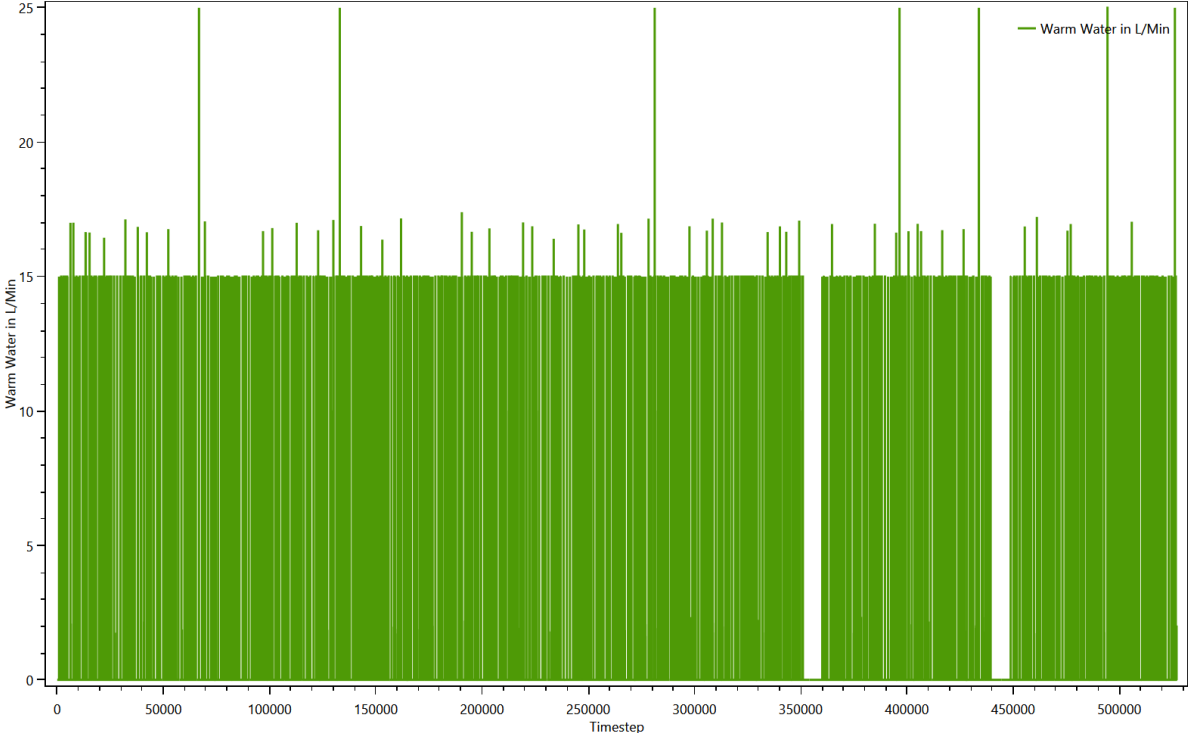
Summed up curve for Electricity from SumProfiles.Electricity.png



Summed up curve for ElectricityMinMax from SumProfiles.ElectricityMinMax..png

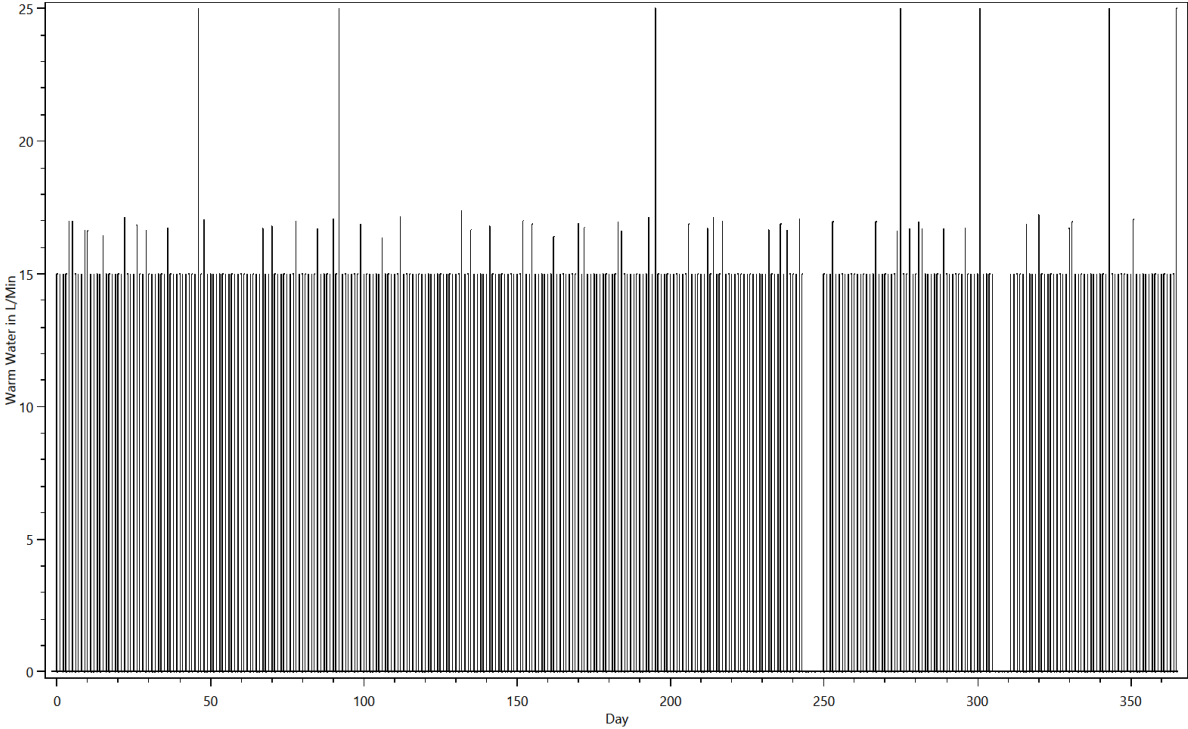


Summed up curve for Warm Water from SumProfiles.Warm Water.png





Summed up curve for Warm WaterMinMax from SumProfiles.Warm WaterMinMax.png



# Time Profiles

## This is made from the files starting with: Time Profiles

These files show which time profiles were used for each device and how often. The content looks like this:

TimeProfiles.HH0.CHR10 Single man, 30 - 64 age, shift worker 0.txt

Device;Load Type;Profile;Number of Activations

Bar;None;04 h 0 min 100% [Synthetic];17

Bathroom Light (100W);Electricity;Bath - light [Synthetic for Light Device];363

Bathroom Mirror Light 30W (CFL);Electricity;Bath - light [Synthetic for Light Device];363

Bathroom Sink 15 L/Min;Warm Water;0 h 01 min 100% [Synthetic];1385

Bed 6 (shift worker woman);None;03 h 0 min 100 % [Synthetic];159

Bed 7 (shift worker2);None;08 h 0 min 100% [Synthetic];307

Bedroom Light (200W);Electricity;Bedroom - light [Synthetic for Light Device];175

CD/DVD Player / Philips DVDR 725 H;Electricity;01 h 30 min 100% [Synthetic];65

CD/DVD Player / Philips DVDR 725 H;Electricity;02 h 0 min 100% [Synthetic];64

CD/DVD Player / Philips DVDR 725 H;Electricity;Standby TV / Receiver 1 h 0 min 3% [Synthetic];8485

Canon CanoScan LIDE 110;Electricity;0 h 10 min 100% [Synthetic];77

Chair;None;0 h 10 min 100% [Synthetic];425

Children Room Light (100W);Electricity;Children's room - light [Synthetic for Light Device];89

Christopeit Treadmill TM 2 Pro;Electricity;0 h 30 min 100% [Synthetic];272

Cleanser;None;01 h 0 min 100% [Synthetic];98

Coffee Machine / Braun KF 580E;Electricity;0 h 10 min 100% [Synthetic];194

Couch;None;01 h 0 min 100% [Synthetic];279

Couch;None;02 h 0 min 100% [Synthetic];22

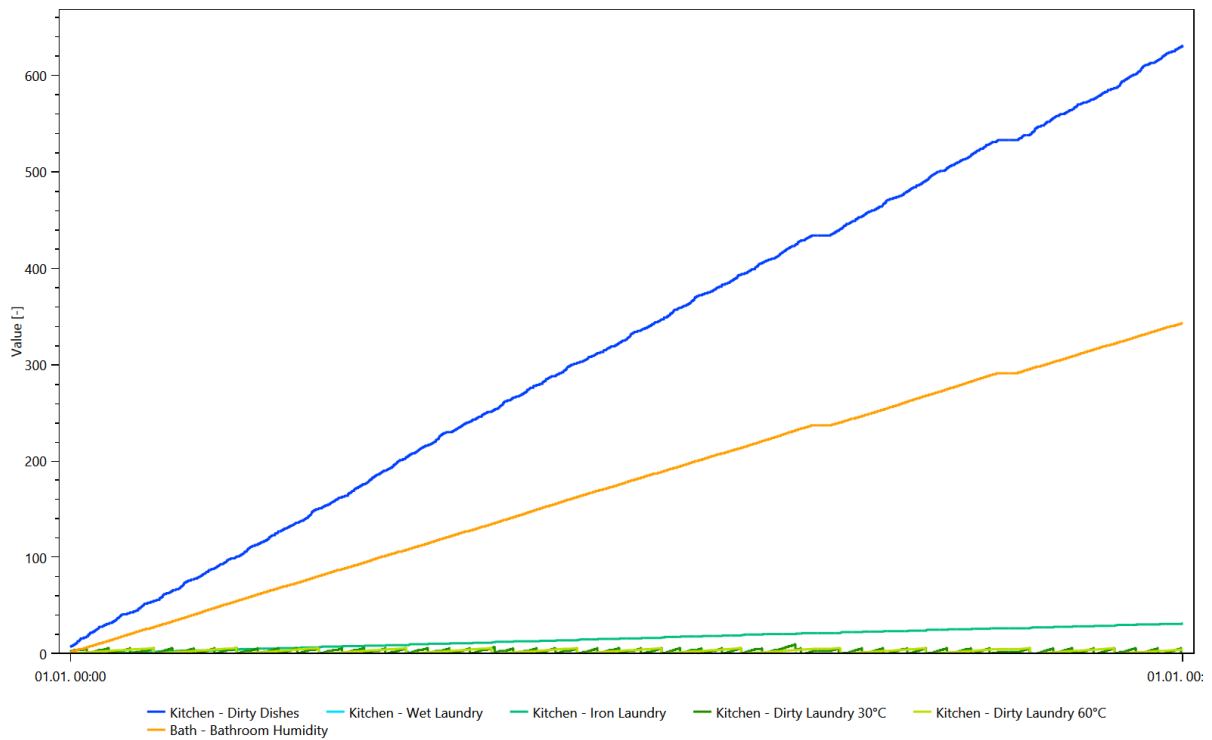
Deep Fryer / DeLonghi F 28311.W Rotofritteuse;Electricity;0 h 30 min 100% [Synthetic];47

# Variables

This is made from the files starting with: Variablelogfile

The variables are used to keep track of things like dirty laundry, dirty dishes and the amount of laundry to iron. They are used to ensure that for example the dishwasher is only turned on if there are sufficient dirty dishes. One chart shows the first 25000 timesteps of the contents of all variables, the other shows the entire time span.

## Variables



# Variables

